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National Cooperative Dairy Herd Improvement Program



A plan for every size herd

OFFICIAL DHI

OWNER SAMPLER

WEIGH-A-DAY-A-MONTH

AGRICULTURAL RESEARCH SERVICE, U. S. DEPARTMENT OF AGRICULTURE

Dairy-Herd-Improvement Letter

ARS 44-230
(Vol. 47, No. 5)

May 1971

STATE LACTATION AVERAGES BY BREED AND YEAR FOR OFFICIAL DHI COWS CALVING FROM 1961 THROUGH 1968 1/

This publication contains lactation averages for milk yield (lb.), fat percentage, and fat yield (lb.) for cows calving in different States by breed and year of calving for the years 1961-68. Lactation averages have been standardized to a twice-a-day milking (2X), 305-day lactation length, mature equivalent (M.E.) basis.

State lactation averages for the years 1962, 1963, 1964, 1965, 1966, 1967, and 1968 are being reported for the first time. Lactation averages for 1961 were previously reported in ARS 44-143, DHIA Lactation Averages 1960-61. However, the breed-year averages in the current publication may differ from previous State lactation averages because of the more appropriate adjustment factors used in these computations.

Records included in averages.--Only Official DHI records 2/ which passed USDA editing procedures described in Dairy-Herd-Improvement Letter, ARS 44-222, December 1970, were

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2/ DHIR records are included since they are also Official DHI records.

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included in the averages. Cows were not included if the breed of sire and breed of dam were different. Records of cows with unknown sires or dams were included in averages for the cow's breed.

For instance, a cow reported as a Brown Swiss (breed 5) would not have been included if her dam was coded as another breed. However, if the cow's sire or dam had been reported as breed 0, unknown, the cow would have been included in the averages for Brown Swiss cows.

How records were standardized to a 2X, 305-day, M.E. basis.--Lactations where cows were denied an opportunity to milk 305 days were projected to a 305-day basis with factors that account for differences in lactation curves by breed, age, and the two yield traits--milk and fat. These factors are currently used by USDA and were published in Dairy-Herd-Improvement Letter, ARS 44-164, August 1965.

All lactations were adjusted to a mature equivalent (M.E.) basis by the age adjustment factors currently in use by USDA. These account for variation due to breed, season, region, and the two yield traits--milk and fat. The factors used were published in Dairy-Herd-Improvement Letter, ARS 44-188, February 1967.

Lactations made on three- or four-times-a-day milking were reduced to a twice-a-day (2X) basis with factors published in ARS 52-1. 3/

Fat percentages were computed from the 2X, 305-day, M.E. milk and fat yields, which put them on the same basis.

Tables of State averages and numbers of records by breed and year.--The number of Official DHI lactation records available in each State for each year of calving and respective 2X, 305-day, M.E. averages for lactation milk yields, fat percentages, and fat yields are presented in two separate tables for each breed. Data for cows calving in the years

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3/ Kendrick, J. F. Standardizing Dairy Herd Improvement Association Records in Proving Sires. U.S. Dept. Agr., Agr. Res. Serv. ARS 52-1. 1955.

1961, 1962, 1963, and 1964 are in the first table for each breed, and data for cows calving in the years 1965, 1966, 1967, and 1968 are in the second table.

Averages for Ayrshire cows calving in different States are in tables 1 and 2. For example, table 1 shows that the 197 Ayrshire cows calving in Alabama in 1961 averages 6,690 pounds of milk, 3.76 percent fat, and 252 pounds of fat. The 199 Ayrshire cows calving in Alabama in 1962 averaged 7,021 pounds of milk, 3.78 percent fat, and 266 pounds of fat. Similar data for other breeds are in tables 3 through 12. Data for Guernseys are in tables 3 and 4; for Holsteins, in tables 5 and 6; for Jerseys, in tables 7 and 8; for Brown Swiss, in tables 9 and 10; and for Milking Shorthorns, in tables 11 and 12.

TABLE 1.--AVERAGE YIELDS OF OFFICIAL DHIA COWS COOED AS AYRSHIRE BY STATE AND CALVING YEAR
ON A 2X, 305-DAY, M.E. BASIS

| STATF | 1 9 6 1 | | | 1 9 6 2 | | | 1 9 6 3 | | | 1 9 6 4 | | | | | | |
|--------|---------|--------|------|---------|---------|--------|---------|-----|---------|---------|------|-----|---------|--------|------|-----|
| | RECORDS | MILK | % | FAT | RECOROS | MILK | % | FAT | RECORDS | MILK | % | FAT | RECORDS | MILK | % | FAT |
| ALA--- | 197 | 6,690 | 3.76 | 252 | 199 | 7,021 | 3.78 | 266 | 181 | 6,708 | 3.77 | 253 | 235 | 7,393 | 3.66 | 271 |
| ALASKA | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ARIZ-- | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ARK--- | 19 | 7,748 | 3.68 | 285 | 25 | 6,985 | 3.57 | 251 | 34 | 9,151 | 3.54 | 324 | 19 | 9,870 | 3.56 | 352 |
| CALIF- | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 10,660 | 4.49 | 479 | 228 | 12,918 | 3.89 | 503 |
| COLO-- | 71 | 9,786 | 3.98 | 390 | 62 | 10,777 | 4.12 | 444 | 43 | 11,624 | 3.72 | 432 | 3 | 7,857 | 4.15 | 326 |
| CONN-- | 854 | 10,170 | 4.01 | 408 | 891 | 10,637 | 4.01 | 426 | 821 | 10,666 | 4.02 | 429 | 865 | 10,814 | 4.02 | 435 |
| DEL--- | 274 | 8,693 | 3.88 | 337 | 265 | 9,187 | 3.93 | 361 | 268 | 9,302 | 3.96 | 369 | 290 | 9,865 | 3.96 | 392 |
| FLA--- | 110 | 9,837 | 3.70 | 363 | 180 | 9,152 | 3.66 | 335 | 158 | 8,907 | 3.56 | 316 | 239 | 9,943 | 3.64 | 362 |
| GA--- | 165 | 9,285 | 3.87 | 358 | 201 | 9,650 | 3.80 | 366 | 205 | 9,834 | 3.82 | 375 | 289 | 9,664 | 3.88 | 375 |
| HAWAII | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| IDAHO- | 26 | 11,547 | 3.87 | 446 | 24 | 12,423 | 3.79 | 471 | 32 | 12,401 | 3.92 | 487 | 67 | 12,107 | 4.00 | 484 |
| ILL--- | 349 | 9,891 | 4.05 | 400 | 523 | 10,141 | 3.99 | 405 | 558 | 10,530 | 3.93 | 414 | 570 | 11,006 | 3.97 | 437 |
| IND--- | 455 | 9,926 | 3.81 | 378 | 480 | 10,239 | 3.81 | 390 | 498 | 10,688 | 3.75 | 405 | 431 | 10,588 | 3.82 | 404 |
| IOWA-- | 757 | 9,741 | 3.92 | 382 | 1,012 | 9,715 | 3.86 | 375 | 908 | 10,399 | 3.83 | 398 | 1,022 | 10,493 | 3.84 | 403 |
| KANS-- | 1,228 | 9,589 | 3.96 | 380 | 1,225 | 9,744 | 3.93 | 383 | 1,234 | 10,146 | 3.96 | 402 | 1,307 | 10,433 | 3.99 | 416 |
| KY---- | 19 | 7,704 | 3.88 | 299 | 29 | 9,112 | 3.67 | 334 | 75 | 8,369 | 3.81 | 319 | 66 | 8,296 | 3.89 | 324 |
| LA---- | ... | ... | ... | ... | 2 | 8,170 | 4.27 | 349 | 1 | 5,750 | 4.77 | 274 | 6 | 7,667 | 3.71 | 284 |
| MAINE- | 510 | 9,879 | 3.98 | 394 | 503 | 9,950 | 3.98 | 396 | 427 | 10,528 | 4.00 | 421 | 431 | 10,648 | 4.01 | 427 |
| MD---- | 617 | 9,530 | 4.01 | 382 | 692 | 9,751 | 4.00 | 390 | 657 | 10,074 | 3.98 | 401 | 454 | 9,930 | 3.97 | 394 |
| MASS-- | 1,165 | 10,338 | 4.02 | 416 | 1,237 | 10,674 | 4.01 | 429 | 1,151 | 10,808 | 3.99 | 431 | 1,145 | 11,321 | 3.99 | 452 |
| MICH-- | 203 | 10,441 | 4.05 | 425 | 240 | 11,049 | 4.00 | 444 | 258 | 11,179 | 4.00 | 448 | 290 | 11,506 | 3.97 | 457 |
| MINN-- | 506 | 9,285 | 3.95 | 367 | 651 | 9,113 | 3.90 | 356 | 644 | 9,864 | 3.85 | 380 | 779 | 10,135 | 3.88 | 394 |
| MISS-- | 144 | 7,565 | 3.81 | 288 | 208 | 8,325 | 3.70 | 308 | 258 | 8,045 | 3.79 | 305 | 354 | 8,306 | 3.77 | 313 |
| MO--- | 3 | 9,913 | 3.66 | 362 | 1 | 16,060 | 3.55 | 570 | 3 | 11,363 | 3.48 | 396 | 16 | 8,939 | 3.79 | 339 |
| MONT-- | 17 | 12,062 | 4.19 | 506 | 38 | 10,916 | 4.11 | 448 | 44 | 10,818 | 4.01 | 434 | 53 | 10,866 | 3.89 | 423 |
| NEBR-- | 48 | 7,963 | 3.96 | 317 | 22 | 8,533 | 3.76 | 321 | 23 | 8,949 | 3.80 | 341 | 19 | 9,839 | 3.81 | 375 |
| NFV-- | 1 | 17,410 | 3.38 | 589 | ... | ... | ... | ... | 1 | 18,220 | 3.49 | 636 | 1 | 16,740 | 3.51 | 588 |
| N. H-- | 820 | 10,521 | 4.03 | 424 | 983 | 10,477 | 4.01 | 420 | 961 | 10,601 | 4.02 | 426 | 916 | 11,140 | 4.02 | 448 |
| N. J-- | 40 | 9,698 | 4.10 | 398 | 30 | 10,034 | 4.03 | 405 | 41 | 9,831 | 4.05 | 398 | 30 | 10,036 | 4.08 | 409 |
| N. MEX | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| N. Y-- | 4,102 | 10,268 | 3.91 | 402 | 4,732 | 10,680 | 3.91 | 418 | 4,863 | 10,829 | 3.92 | 425 | 5,029 | 11,212 | 3.91 | 439 |
| N. C-- | 561 | 9,056 | 3.84 | 348 | 651 | 9,287 | 3.84 | 357 | 580 | 9,737 | 3.83 | 373 | 484 | 10,173 | 3.84 | 390 |
| N. DAK | 6 | 8,152 | 3.61 | 296 | 12 | 7,153 | 3.80 | 273 | 11 | 8,015 | 4.08 | 327 | 12 | 8,192 | 4.03 | 330 |
| OHIO-- | 677 | 9,930 | 3.81 | 378 | 910 | 10,385 | 3.87 | 402 | 1,426 | 10,960 | 3.89 | 426 | 1,618 | 11,202 | 3.88 | 435 |
| OKLA-- | 211 | 10,316 | 4.02 | 415 | 293 | 9,931 | 3.86 | 383 | 274 | 10,688 | 3.80 | 406 | 313 | 10,969 | 3.74 | 410 |
| OREG-- | 192 | 9,692 | 3.55 | 344 | 271 | 8,885 | 3.59 | 319 | 280 | 9,660 | 3.52 | 340 | 256 | 9,283 | 3.72 | 346 |
| PA---- | 2,457 | 9,726 | 4.02 | 391 | 3,368 | 10,178 | 4.05 | 412 | 3,358 | 10,353 | 4.07 | 421 | 3,272 | 10,431 | 4.06 | 424 |
| R. I-- | 341 | 10,468 | 3.94 | 413 | 307 | 11,303 | 3.95 | 446 | 303 | 11,075 | 4.07 | 450 | 337 | 10,705 | 4.05 | 434 |
| S. C-- | 72 | 8,708 | 3.60 | 313 | 35 | 9,856 | 3.70 | 365 | 30 | 10,613 | 3.75 | 398 | 30 | 10,225 | 3.65 | 371 |
| S. DAK | 34 | 9,828 | 3.88 | 382 | 66 | 10,262 | 3.90 | 401 | 95 | 10,321 | 3.88 | 400 | 125 | 10,017 | 3.90 | 392 |
| TENN-- | 1 | 9,530 | 3.79 | 361 | 58 | 9,241 | 3.88 | 358 | 115 | 10,261 | 3.86 | 395 | 271 | 10,596 | 3.87 | 410 |
| TEX-- | 141 | 9,726 | 3.75 | 364 | 175 | 9,455 | 3.62 | 342 | 123 | 9,773 | 3.65 | 356 | 85 | 10,554 | 3.67 | 388 |
| UTAH-- | 21 | 10,120 | 3.85 | 389 | 43 | 8,667 | 3.92 | 339 | 40 | 9,451 | 3.84 | 363 | 21 | 10,105 | 3.96 | 400 |
| VI---- | 1,866 | 10,145 | 3.94 | 400 | 1,872 | 10,456 | 3.96 | 414 | 1,816 | 10,544 | 3.92 | 413 | 1,923 | 10,901 | 3.93 | 428 |
| VA---- | 499 | 8,946 | 3.93 | 351 | 531 | 9,532 | 3.95 | 376 | 551 | 10,001 | 3.92 | 392 | 629 | 10,154 | 3.93 | 399 |
| WASH-- | 188 | 10,931 | 4.04 | 441 | 261 | 11,108 | 3.93 | 437 | 261 | 11,459 | 4.00 | 458 | 297 | 10,776 | 4.01 | 432 |
| W. VA- | 150 | 9,322 | 3.96 | 369 | 170 | 9,667 | 3.97 | 384 | 159 | 10,439 | 3.94 | 412 | 173 | 10,424 | 3.95 | 412 |
| WIS-- | 517 | 9,681 | 3.95 | 383 | 545 | 9,879 | 3.94 | 389 | 530 | 10,102 | 3.92 | 396 | 608 | 10,391 | 3.96 | 411 |
| WYO-- | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| U. S.- | 20,634 | 9,877 | 3.94 | 390 | 24,023 | 10,162 | 3.94 | 400 | 24,300 | 10,436 | 3.94 | 411 | 25,608 | 10,693 | 3.94 | 421 |

TABLE 2.--AVERAGE YIELDS OF OFFICIAL DHIA COWS CODED AS AYRSHIRE BY STATE AND CALVING YEAR
ON A 2X, 305-DAY, M.E. BASIS

| STATE | 1 9 6 5 | | | | 1 9 6 6 | | | | 1 9 6 7 | | | | 1 9 6 8 | | | |
|--------|---------|--------|------|-----|---------|--------|------|-----|---------|--------|------|-----|---------|--------|------|-----|
|  | RECORDS | MILK | % | FAT | RECORDS | MILK | % | FAT | RECORDS | MILK | % | FAT | RECORDS | MILK | % | FAT |
| ALA--- | 313 | 8,112 | 3.66 | 297 | 281 | 9,124 | 3.62 | 331 | 236 | 9,461 | 3.60 | 340 | 179 | 10,349 | 3.53 | 366 |
| ALASKA | ... | ... | ... | ... | 1 | 12,610 | 4.25 | 536 | ... | ... | ... | ... | ... | ... | ... | ... |
| ARIZ-- | ... | ... | ... | ... | 1 | 8,510 | 3.25 | 277 | ... | ... | ... | ... | 44 | 12,488 | 3.71 | 464 |
| ARK-- | 11 | 10,289 | 3.50 | 362 | 10 | 12,868 | 3.78 | 487 | 8 | 13,765 | 3.61 | 496 | 5 | 12,314 | 3.45 | 425 |
| CALIF- | 283 | 13,288 | 3.77 | 500 | 263 | 13,874 | 3.83 | 532 | 269 | 13,207 | 3.86 | 509 | 302 | 13,280 | 3.89 | 516 |
| COLO-- | 28 | 10,023 | 3.87 | 388 | 70 | 10,477 | 4.01 | 420 | 86 | 10,581 | 3.92 | 413 | 90 | 11,085 | 3.90 | 431 |
| CONN-- | 723 | 11,095 | 3.99 | 442 | 752 | 11,164 | 3.99 | 446 | 777 | 11,204 | 3.99 | 447 | 731 | 11,820 | 3.92 | 464 |
| DEL--- | 252 | 10,157 | 3.96 | 402 | 274 | 10,000 | 3.96 | 396 | 256 | 9,634 | 4.04 | 390 | 205 | 9,684 | 4.11 | 399 |
| FLA--- | 495 | 9,749 | 3.66 | 357 | 402 | 9,937 | 3.51 | 348 | 368 | 10,380 | 3.49 | 362 | 388 | 10,445 | 3.64 | 380 |
| GA--- | 300 | 9,930 | 3.92 | 389 | 321 | 10,506 | 3.98 | 419 | 324 | 10,817 | 3.97 | 430 | 268 | 10,403 | 3.87 | 403 |
| HAWAII | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| IDAHO- | 66 | 11,275 | 3.83 | 431 | 42 | 12,548 | 4.00 | 502 | 49 | 12,418 | 3.96 | 492 | 63 | 12,134 | 3.89 | 473 |
| ILL-- | 554 | 11,142 | 3.93 | 437 | 518 | 11,269 | 3.92 | 442 | 661 | 11,245 | 3.85 | 434 | 744 | 11,215 | 3.86 | 433 |
| IND-- | 359 | 10,917 | 3.79 | 413 | 330 | 11,036 | 3.85 | 425 | 312 | 11,056 | 3.84 | 425 | 204 | 11,186 | 3.83 | 428 |
| IOWA-- | 1,055 | 10,607 | 3.84 | 407 | 1,166 | 10,857 | 3.88 | 421 | 1,204 | 11,277 | 3.84 | 433 | 1,220 | 11,459 | 3.79 | 434 |
| KANS-- | 1,448 | 10,488 | 3.94 | 414 | 1,284 | 10,640 | 3.95 | 420 | 1,203 | 10,826 | 3.94 | 427 | 1,232 | 11,009 | 3.94 | 434 |
| KY---- | 80 | 8,093 | 3.87 | 314 | 85 | 9,680 | 3.75 | 363 | 79 | 10,158 | 3.90 | 397 | 58 | 11,405 | 4.06 | 463 |
| LA---- | 7 | 7,450 | 3.59 | 269 | 27 | 8,817 | 3.59 | 317 | 27 | 8,764 | 3.63 | 317 | 85 | 9,447 | 3.54 | 334 |
| MAINE- | 319 | 10,660 | 3.95 | 421 | 272 | 10,682 | 3.97 | 424 | 254 | 11,037 | 3.96 | 438 | 213 | 11,242 | 3.96 | 446 |
| MD---- | 451 | 10,630 | 4.02 | 427 | 545 | 10,938 | 4.03 | 441 | 568 | 10,724 | 3.96 | 425 | 596 | 10,868 | 3.97 | 431 |
| MASS-- | 1,032 | 11,492 | 4.01 | 461 | 1,068 | 11,330 | 4.02 | 456 | 931 | 10,945 | 3.97 | 434 | 925 | 11,333 | 3.99 | 452 |
| MICH-- | 237 | 11,784 | 3.96 | 467 | 153 | 11,740 | 3.83 | 449 | 141 | 11,584 | 3.88 | 449 | 162 | 11,319 | 3.85 | 436 |
| MINN-- | 805 | 9,467 | 3.88 | 368 | 688 | 9,942 | 3.91 | 389 | 675 | 10,285 | 3.90 | 401 | 721 | 10,023 | 3.89 | 390 |
| MISS-- | 406 | 8,195 | 3.84 | 315 | 503 | 8,978 | 3.80 | 341 | 607 | 9,758 | 3.76 | 367 | 607 | 9,548 | 3.72 | 354 |
| MO---- | 7 | 7,316 | 3.76 | 275 | 11 | 8,146 | 3.79 | 309 | 11 | 8,179 | 3.82 | 313 | 22 | 9,385 | 3.72 | 350 |
| MONT-- | 60 | 10,899 | 4.03 | 439 | 46 | 11,383 | 4.07 | 464 | 20 | 11,389 | 3.96 | 451 | 28 | 13,200 | 3.72 | 491 |
| NEBR-- | 37 | 9,145 | 3.85 | 351 | 37 | 9,328 | 3.85 | 360 | 113 | 9,864 | 3.90 | 385 | 165 | 9,465 | 3.98 | 377 |
| NEV-- | 1 | 11,450 | 3.70 | 424 | ... | ... | ... | ... | ... | ... | ... | ... | 13 | 13,932 | 3.41 | 476 |
| N. H-- | 881 | 11,345 | 4.03 | 457 | 806 | 11,210 | 4.02 | 451 | 846 | 11,498 | 3.93 | 452 | 775 | 12,009 | 3.90 | 468 |
| N. J-- | 44 | 10,850 | 4.04 | 438 | 62 | 11,057 | 4.00 | 441 | 62 | 10,310 | 3.86 | 397 | 37 | 11,317 | 3.83 | 433 |
| N. MEX | ... | ... | ... | ... | 1 | 11,270 | 3.74 | 421 | 13 | 8,738 | 3.83 | 332 | 9 | 10,384 | 3.74 | 389 |
| N. Y-- | 4,699 | 11,461 | 3.90 | 447 | 4,570 | 11,468 | 3.91 | 449 | 4,665 | 11,473 | 3.92 | 450 | 4,542 | 11,720 | 3.91 | 458 |
| N. C-- | 457 | 10,513 | 3.87 | 407 | 400 | 10,862 | 3.82 | 415 | 356 | 11,153 | 3.78 | 421 | 320 | 11,368 | 3.80 | 432 |
| N. DAK | 10 | 8,441 | 3.87 | 327 | 4 | 9,077 | 3.81 | 346 | 5 | 10,438 | 3.61 | 377 | ... | ... | ... | ... |
| OHIO-- | 1,689 | 11,017 | 3.86 | 425 | 1,496 | 11,157 | 3.90 | 435 | 1,541 | 10,945 | 3.91 | 428 | 1,476 | 10,945 | 3.90 | 427 |
| OKLA-- | 322 | 11,271 | 3.74 | 422 | 322 | 11,252 | 3.76 | 423 | 439 | 10,808 | 3.78 | 408 | 479 | 10,945 | 3.85 | 422 |
| OREG-- | 254 | 9,461 | 3.92 | 371 | 223 | 10,279 | 3.77 | 388 | 350 | 11,450 | 3.87 | 443 | 296 | 11,587 | 3.89 | 450 |
| PA---- | 3,165 | 10,305 | 4.05 | 417 | 2,861 | 10,676 | 4.05 | 432 | 2,799 | 10,515 | 4.03 | 424 | 2,399 | 10,842 | 4.01 | 435 |
| R. I-- | 384 | 10,491 | 4.02 | 422 | 233 | 10,332 | 3.90 | 403 | 260 | 11,113 | 3.94 | 438 | 232 | 11,163 | 3.81 | 426 |
| S. C-- | 42 | 9,762 | 3.70 | 361 | 36 | 10,151 | 3.65 | 370 | 26 | 10,740 | 3.85 | 413 | 16 | 12,057 | 3.61 | 435 |
| S. DAK | 133 | 10,001 | 3.98 | 399 | 117 | 10,308 | 3.98 | 410 | 95 | 10,231 | 3.94 | 403 | 94 | 10,496 | 3.79 | 398 |
| TENN-- | 296 | 10,784 | 3.90 | 421 | 373 | 11,308 | 3.91 | 441 | 403 | 11,167 | 3.85 | 430 | 223 | 9,954 | 3.97 | 395 |
| TEX-- | 190 | 9,269 | 3.74 | 347 | 137 | 9,519 | 3.69 | 351 | 63 | 12,077 | 3.55 | 429 | 67 | 12,657 | 3.59 | 455 |
| UTAH-- | 38 | 10,283 | 3.73 | 382 | 33 | 11,039 | 3.58 | 391 | 38 | 11,054 | 3.62 | 400 | 32 | 11,419 | 3.72 | 424 |
| VT---- | 1,889 | 11,325 | 3.90 | 441 | 1,691 | 11,368 | 3.90 | 444 | 1,733 | 11,379 | 3.89 | 443 | 1,706 | 11,772 | 3.90 | 459 |
| VA---- | 691 | 10,041 | 3.93 | 395 | 661 | 10,613 | 3.97 | 421 | 592 | 10,830 | 3.95 | 428 | 565 | 11,396 | 3.89 | 444 |
| WASH-- | 396 | 11,126 | 4.01 | 446 | 459 | 11,132 | 3.99 | 444 | 430 | 11,594 | 3.99 | 463 | 514 | 11,582 | 3.97 | 460 |
| W. VA- | 161 | 10,057 | 3.86 | 388 | 189 | 9,990 | 3.89 | 389 | 220 | 10,111 | 3.92 | 397 | 205 | 10,483 | 3.87 | 405 |
| WIS-- | 583 | 10,232 | 3.98 | 407 | 565 | 10,420 | 3.97 | 413 | 532 | 10,523 | 3.89 | 409 | 546 | 10,657 | 3.84 | 409 |
| WYO-- | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| U. S.- | 25,653 | 10,749 | 3.92 | 422 | 24,389 | 10,936 | 3.93 | 429 | 24,647 | 11,007 | 3.91 | 430 | 23,803 | 11,219 | 3.90 | 437 |

TABLE 3.--AVERAGE YIELDS OF OFFICIAL DH_I COWS COOED AS GUERNSEY BY STATE AND CALVING YEAR
ON A 2X, 305-DAY, M.E. BASIS

| STATE | RECORDS | 1 9 6 1 | | | 1 9 6 2 | | | 1 9 6 3 | | | 1 9 6 4 | | | | | |
|--------|---------|---------|------|-----|---------|--------|------|---------|---------|--------|---------|-----|---------|--------|------|-----|
| | | MILK | % | FAT | MILK | % | FAT | MILK | % | FAT | MILK | % | FAT | | | |
| ALA--- | 1,420 | 7,197 | 4.35 | 313 | 1,485 | 7,313 | 4.39 | 321 | 1,724 | 7,549 | 4.44 | 335 | 1,843 | 7,908 | 4.35 | 344 |
| ALASKA | 1 | 9,140 | 4.78 | 437 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| ARIZ-- | 339 | 10,232 | 4.57 | 468 | 527 | 9,926 | 4.46 | 443 | 570 | 9,898 | 4.46 | 441 | 475 | 10,209 | 4.45 | 454 |
| ARK-- | 386 | 7,539 | 4.40 | 332 | 399 | 7,604 | 4.32 | 329 | 400 | 8,241 | 4.37 | 360 | 385 | 8,609 | 4.31 | 371 |
| CALIF- | 1,346 | 10,102 | 4.78 | 483 | 1,301 | 10,562 | 4.69 | 495 | 1,419 | 10,457 | 4.67 | 488 | 2,100 | 10,671 | 4.67 | 498 |
| COLO-- | 474 | 8,833 | 4.72 | 417 | 568 | 8,681 | 4.71 | 409 | 597 | 8,795 | 4.59 | 404 | 609 | 9,034 | 4.62 | 417 |
| CONN-- | 2,984 | 9,613 | 4.75 | 457 | 3,262 | 9,983 | 4.78 | 478 | 3,218 | 10,065 | 4.78 | 481 | 3,194 | 10,383 | 4.78 | 497 |
| DEL-- | 659 | 8,276 | 4.57 | 379 | 670 | 8,675 | 4.61 | 401 | 604 | 9,118 | 4.67 | 427 | 578 | 9,015 | 4.64 | 419 |
| FLA-- | 1,888 | 7,903 | 4.40 | 348 | 2,493 | 7,995 | 4.44 | 355 | 3,066 | 8,311 | 4.38 | 364 | 3,729 | 8,437 | 4.35 | 367 |
| GA---- | 1,578 | 7,635 | 4.57 | 349 | 1,647 | 7,891 | 4.52 | 357 | 1,693 | 8,155 | 4.59 | 375 | 1,882 | 8,522 | 4.56 | 389 |
| HAWAII | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 10,645 | 3.86 | 411 | 2 | 8,295 | 3.46 | 287 |
| IDAHO- | 843 | 9,296 | 4.69 | 436 | 912 | 9,598 | 4.69 | 450 | 1,065 | 9,347 | 4.65 | 435 | 1,044 | 9,294 | 4.60 | 427 |
| ILL-- | 3,784 | 8,844 | 4.76 | 421 | 4,138 | 8,943 | 4.75 | 425 | 4,230 | 9,392 | 4.75 | 447 | 4,186 | 9,448 | 4.77 | 450 |
| IND-- | 5,515 | 8,858 | 4.76 | 422 | 5,561 | 9,042 | 4.79 | 433 | 5,471 | 9,504 | 4.79 | 456 | 5,582 | 9,716 | 4.76 | 463 |
| IOWA-- | 3,788 | 8,391 | 4.72 | 397 | 4,362 | 8,443 | 4.72 | 398 | 3,768 | 8,837 | 4.68 | 414 | 3,782 | 9,059 | 4.68 | 425 |
| KANS-- | 998 | 8,186 | 4.84 | 397 | 1,110 | 8,403 | 4.79 | 403 | 1,050 | 8,884 | 4.79 | 426 | 1,252 | 9,000 | 4.83 | 434 |
| KY---- | 632 | 7,976 | 4.66 | 371 | 798 | 7,935 | 4.61 | 366 | 959 | 7,945 | 4.68 | 372 | 1,152 | 8,159 | 4.63 | 378 |
| LA---- | 528 | 7,757 | 4.55 | 353 | 773 | 7,555 | 4.44 | 335 | 809 | 7,703 | 4.42 | 341 | 927 | 7,768 | 4.37 | 340 |
| MAINE- | 1,953 | 9,069 | 4.69 | 426 | 2,040 | 9,283 | 4.69 | 436 | 1,927 | 9,419 | 4.73 | 445 | 1,779 | 9,328 | 4.70 | 438 |
| MD---- | 3,882 | 8,342 | 4.73 | 395 | 4,695 | 8,608 | 4.77 | 411 | 4,593 | 8,920 | 4.77 | 425 | 3,810 | 8,936 | 4.75 | 424 |
| MASS-- | 2,405 | 9,172 | 4.71 | 432 | 2,365 | 9,547 | 4.72 | 451 | 2,191 | 9,586 | 4.71 | 452 | 2,011 | 9,972 | 4.69 | 467 |
| MICH-- | 4,874 | 8,949 | 4.75 | 425 | 5,094 | 9,193 | 4.77 | 439 | 4,667 | 9,410 | 4.77 | 449 | 4,404 | 9,652 | 4.77 | 461 |
| MINN-- | 4,377 | 8,576 | 4.75 | 407 | 5,083 | 8,435 | 4.75 | 401 | 5,023 | 8,804 | 4.72 | 416 | 5,920 | 9,065 | 4.73 | 429 |
| MISS-- | 863 | 7,854 | 4.48 | 352 | 1,149 | 7,710 | 4.39 | 338 | 1,643 | 7,134 | 4.42 | 315 | 2,233 | 7,327 | 4.38 | 321 |
| MO---- | 1,335 | 8,823 | 4.69 | 414 | 1,257 | 9,044 | 4.71 | 426 | 1,357 | 9,271 | 4.72 | 438 | 1,623 | 9,333 | 4.64 | 433 |
| MONT-- | 75 | 8,425 | 5.04 | 425 | 35 | 9,072 | 4.92 | 446 | ... | ... | ... | ... | 18 | 13,454 | 4.94 | 663 |
| NFBR-- | 878 | 8,599 | 4.84 | 416 | 1,183 | 8,183 | 4.77 | 390 | 1,063 | 8,627 | 4.75 | 410 | 1,165 | 8,617 | 4.78 | 412 |
| NEV-- | 9 | 9,116 | 4.19 | 382 | 7 | 9,083 | 3.97 | 360 | 13 | 10,544 | 4.20 | 442 | 12 | 10,910 | 4.15 | 452 |
| N. H-- | 954 | 8,956 | 4.59 | 411 | 1,033 | 8,830 | 4.57 | 403 | 910 | 8,730 | 4.59 | 401 | 774 | 9,365 | 4.59 | 430 |
| N. J-- | 2,382 | 9,160 | 4.83 | 443 | 2,469 | 9,712 | 4.84 | 470 | 2,738 | 9,834 | 4.90 | 482 | 2,877 | 9,717 | 4.84 | 471 |
| N. MEX | 387 | 9,835 | 4.67 | 459 | 428 | 10,094 | 4.67 | 471 | 359 | 9,793 | 4.55 | 446 | 302 | 9,299 | 4.58 | 426 |
| N. Y-- | 9,006 | 9,010 | 4.65 | 419 | 9,476 | 9,326 | 4.66 | 435 | 9,379 | 9,373 | 4.68 | 438 | 9,062 | 9,670 | 4.66 | 451 |
| N. C-- | 4,282 | 7,962 | 4.63 | 369 | 4,593 | 8,220 | 4.64 | 382 | 4,015 | 8,452 | 4.67 | 395 | 3,694 | 8,594 | 4.68 | 402 |
| N. OAK | 178 | 8,308 | 4.80 | 399 | 203 | 8,308 | 4.77 | 397 | 193 | 8,384 | 4.82 | 404 | 169 | 8,591 | 4.75 | 409 |
| OHIO-- | 5,194 | 9,084 | 4.66 | 424 | 6,051 | 9,187 | 4.68 | 430 | 6,862 | 9,524 | 4.70 | 448 | 7,328 | 9,584 | 4.67 | 448 |
| OKLA-- | 690 | 8,096 | 4.57 | 370 | 854 | 7,801 | 4.60 | 359 | 613 | 8,187 | 4.57 | 374 | 852 | 8,152 | 4.38 | 357 |
| OREG-- | 2,675 | 9,374 | 4.72 | 443 | 2,448 | 9,570 | 4.73 | 453 | 2,463 | 9,648 | 4.70 | 454 | 1,815 | 9,834 | 4.67 | 460 |
| PA---- | 13,736 | 8,704 | 4.71 | 410 | 18,816 | 9,102 | 4.76 | 433 | 18,198 | 9,161 | 4.76 | 436 | 17,782 | 9,262 | 4.75 | 440 |
| R. I-- | 75 | 10,024 | 4.55 | 456 | 83 | 9,470 | 4.85 | 460 | 77 | 8,928 | 4.86 | 434 | 112 | 9,452 | 4.82 | 457 |
| S. C-- | 3,741 | 7,597 | 4.48 | 341 | 4,659 | 7,803 | 4.49 | 350 | 4,718 | 8,043 | 4.49 | 362 | 5,110 | 8,218 | 4.49 | 369 |
| S. DAK | 126 | 7,942 | 4.62 | 367 | 134 | 8,081 | 4.50 | 364 | 125 | 8,342 | 4.44 | 371 | 122 | 9,206 | 4.39 | 404 |
| TENN-- | 1,072 | 8,283 | 4.73 | 392 | 1,644 | 8,148 | 4.71 | 384 | 1,649 | 8,250 | 4.64 | 383 | 2,359 | 8,543 | 4.57 | 390 |
| TEX-- | 672 | 8,506 | 4.45 | 379 | 683 | 8,381 | 4.40 | 369 | 628 | 8,637 | 4.35 | 376 | 554 | 8,897 | 4.41 | 393 |
| UTAH-- | 466 | 9,120 | 4.61 | 420 | 566 | 9,296 | 4.57 | 425 | 490 | 9,273 | 4.63 | 429 | 447 | 9,188 | 4.63 | 426 |
| VT---- | 1,501 | 8,867 | 4.63 | 411 | 1,558 | 9,146 | 4.63 | 424 | 1,481 | 9,313 | 4.62 | 431 | 1,445 | 9,500 | 4.60 | 438 |
| VA---- | 6,436 | 8,596 | 4.72 | 406 | 6,583 | 8,700 | 4.69 | 409 | 5,914 | 8,981 | 4.71 | 423 | 6,158 | 8,977 | 4.70 | 422 |
| WASH-- | 3,215 | 9,722 | 4.76 | 463 | 3,609 | 9,862 | 4.77 | 471 | 3,357 | 9,927 | 4.78 | 475 | 2,889 | 10,006 | 4.77 | 478 |
| W. VA- | 599 | 7,650 | 4.60 | 352 | 504 | 8,172 | 4.64 | 379 | 494 | 8,451 | 4.58 | 387 | 476 | 8,635 | 4.59 | 397 |
| WIS-- | 8,465 | 8,774 | 4.71 | 413 | 8,793 | 8,875 | 4.69 | 417 | 9,764 | 9,093 | 4.69 | 426 | 10,815 | 9,234 | 4.70 | 434 |
| WYO-- | 17 | 9,250 | 4.73 | 437 | 28 | 8,870 | 4.68 | 415 | 20 | 9,710 | 4.89 | 474 | 28 | 10,535 | 4.75 | 500 |
| U. S.- | 113,683 | 8,718 | 4.69 | 409 | 128,129 | 8,895 | 4.70 | 418 | 127,569 | 9,082 | 4.69 | 427 | 130,867 | 9,208 | 4.68 | 431 |

TABLE 4.--AVERAGE YIELDS OF OFFICIAL DHI COWS CODED AS GUERNSEY BY STATE AND CALVING YEAR
ON A 2X, 305-DAY, M.E. BASIS

| STATE | 1 9 6 5 | | | 1 9 6 6 | | | 1 9 6 7 | | | 1 9 6 8 | | |
|--------|---------|--------|----------|---------|--------|----------|---------|--------|----------|---------|--------|----------|
|  | RECORDS | MILK | % FAT | RECORDS | MILK | % FAT | RECORDS | MILK | % FAT | RECORDS | MILK | % FAT |
| ALA--- | 1,768 | 8,055 | 4.32 348 | 1,635 | 8,262 | 4.30 356 | 1,339 | 8,423 | 4.23 357 | 1,186 | 8,716 | 4.28 373 |
| ALASKA | *** | *** | *** *** | *** | *** | *** *** | *** | *** | *** *** | *** | *** | *** *** |
| ARIZ-- | 341 | 11,264 | 4.46 502 | 411 | 11,298 | 4.39 495 | 722 | 11,351 | 4.17 474 | 780 | 11,376 | 4.26 485 |
| ARK-- | 328 | 8,910 | 4.40 392 | 233 | 9,722 | 4.47 434 | 231 | 10,026 | 4.46 447 | 341 | 9,305 | 4.40 409 |
| CALIF- | 2,389 | 10,607 | 4.63 491 | 2,544 | 10,706 | 4.57 489 | 2,852 | 11,028 | 4.59 506 | 3,663 | 10,913 | 4.57 498 |
| COLO-- | 538 | 8,836 | 4.65 411 | 446 | 9,141 | 4.65 425 | 480 | 9,527 | 4.63 441 | 589 | 10,050 | 4.63 465 |
| CONN-- | 2,788 | 10,321 | 4.76 491 | 2,601 | 10,251 | 4.73 485 | 2,385 | 10,128 | 4.70 477 | 2,241 | 10,274 | 4.67 480 |
| DEL-- | 490 | 9,007 | 4.66 421 | 474 | 8,726 | 4.70 411 | 453 | 8,425 | 4.67 393 | 401 | 8,296 | 4.57 379 |
| FLA-- | 4,247 | 8,445 | 4.33 366 | 3,824 | 8,386 | 4.27 358 | 3,581 | 8,835 | 4.29 379 | 3,316 | 8,788 | 4.31 379 |
| GA-- | 1,951 | 8,875 | 4.56 405 | 1,882 | 9,021 | 4.54 410 | 1,879 | 9,297 | 4.59 427 | 1,830 | 9,692 | 4.58 445 |
| HAWAII | *** | *** | *** *** | 1 | 10,980 | 3.65 401 | 3 | 9,397 | 3.89 366 | 3 | 9,810 | 3.83 376 |
| IDAHO- | 1,546 | 9,673 | 4.62 447 | 1,594 | 10,068 | 4.60 463 | 1,694 | 9,867 | 4.59 453 | 1,701 | 10,031 | 4.58 459 |
| ILL-- | 3,907 | 9,513 | 4.71 448 | 3,677 | 9,642 | 4.73 457 | 3,389 | 9,691 | 4.71 456 | 3,245 | 9,598 | 4.69 450 |
| IND-- | 5,632 | 9,682 | 4.73 459 | 4,971 | 10,018 | 4.75 476 | 4,874 | 10,035 | 4.74 476 | 4,828 | 10,064 | 4.71 474 |
| IOWA-- | 3,693 | 8,837 | 4.69 414 | 3,275 | 9,154 | 4.69 430 | 3,343 | 9,351 | 4.70 440 | 3,445 | 9,338 | 4.73 442 |
| KANS-- | 1,268 | 9,121 | 4.77 436 | 1,216 | 9,360 | 4.76 446 | 1,516 | 9,242 | 4.78 442 | 1,461 | 9,360 | 4.79 448 |
| KY---- | 1,001 | 8,484 | 4.67 396 | 974 | 8,543 | 4.67 400 | 881 | 8,896 | 4.65 414 | 868 | 9,059 | 4.59 416 |
| LA---- | 1,306 | 8,306 | 4.34 361 | 1,602 | 8,526 | 4.35 371 | 1,736 | 8,615 | 4.45 384 | 1,469 | 8,879 | 4.41 392 |
| MAINE- | 1,375 | 9,527 | 4.71 448 | 1,246 | 9,315 | 4.67 435 | 1,124 | 9,165 | 4.61 422 | 941 | 9,527 | 4.56 435 |
| MD---- | 3,182 | 9,191 | 4.78 440 | 3,452 | 9,262 | 4.80 445 | 3,284 | 9,115 | 4.77 435 | 3,180 | 9,336 | 4.78 446 |
| MASS-- | 1,663 | 9,986 | 4.70 470 | 1,569 | 9,977 | 4.69 468 | 1,380 | 10,053 | 4.70 473 | 1,233 | 10,293 | 4.66 480 |
| MICH-- | 3,742 | 9,845 | 4.75 468 | 3,423 | 10,053 | 4.78 481 | 3,391 | 9,925 | 4.78 475 | 3,030 | 10,317 | 4.78 494 |
| MINN-- | 6,045 | 8,707 | 4.73 411 | 5,587 | 8,975 | 4.72 423 | 5,629 | 9,363 | 4.70 440 | 5,779 | 9,381 | 4.70 441 |
| MISS-- | 2,619 | 7,907 | 4.37 346 | 2,626 | 8,223 | 4.48 369 | 2,751 | 8,371 | 4.48 376 | 2,658 | 8,918 | 4.43 396 |
| MO---- | 1,962 | 9,197 | 4.60 423 | 2,054 | 9,454 | 4.58 433 | 2,279 | 9,713 | 4.60 447 | 2,459 | 9,631 | 4.58 441 |
| MONT-- | 30 | 12,918 | 4.92 635 | 19 | 12,409 | 4.80 596 | 7 | 9,879 | 4.72 467 | 29 | 9,906 | 5.21 516 |
| NEBR-- | 1,053 | 8,432 | 4.74 400 | 1,111 | 8,768 | 4.76 417 | 1,074 | 8,804 | 4.76 419 | 1,136 | 8,849 | 4.75 421 |
| NEV-- | 5 | 11,666 | 3.91 456 | 4 | 9,492 | 4.00 380 | 3 | 9,613 | 4.14 398 | 2 | 9,130 | 4.59 419 |
| N. H-- | 664 | 9,534 | 4.54 433 | 633 | 9,413 | 4.53 426 | 573 | 8,894 | 4.48 399 | 526 | 8,917 | 4.43 395 |
| N. J-- | 2,388 | 9,878 | 4.79 473 | 2,255 | 9,710 | 4.81 467 | 2,094 | 9,750 | 4.77 465 | 1,839 | 9,812 | 4.77 468 |
| N. MEX | 644 | 10,330 | 4.53 468 | 1,605 | 10,766 | 4.43 477 | 1,589 | 11,547 | 4.32 499 | 1,806 | 11,568 | 4.16 481 |
| N. Y-- | 7,541 | 9,829 | 4.68 460 | 6,921 | 9,818 | 4.70 462 | 6,523 | 9,854 | 4.69 463 | 5,984 | 10,100 | 4.68 473 |
| N. C-- | 3,674 | 8,786 | 4.68 411 | 3,481 | 9,119 | 4.67 426 | 2,857 | 9,291 | 4.66 433 | 2,306 | 9,561 | 4.64 444 |
| N. DAK | 174 | 8,426 | 4.77 402 | 153 | 8,493 | 4.83 411 | 143 | 8,964 | 4.74 425 | 150 | 9,561 | 4.83 462 |
| OHIO-- | 7,273 | 9,663 | 4.65 449 | 6,496 | 9,679 | 4.68 453 | 5,920 | 9,676 | 4.68 453 | 5,834 | 9,596 | 4.68 449 |
| OKLA-- | 724 | 8,793 | 4.26 375 | 738 | 9,443 | 4.29 405 | 833 | 9,069 | 4.31 391 | 773 | 9,176 | 4.40 404 |
| OREG-- | 1,939 | 9,838 | 4.63 456 | 1,967 | 10,214 | 4.63 473 | 2,702 | 10,321 | 4.63 478 | 2,970 | 10,276 | 4.62 474 |
| PA---- | 16,967 | 9,472 | 4.73 448 | 15,413 | 9,541 | 4.73 452 | 14,485 | 9,369 | 4.73 443 | 12,112 | 9,574 | 4.70 451 |
| R. I-- | 161 | 9,136 | 4.80 440 | 172 | 8,503 | 4.72 402 | 108 | 8,503 | 4.75 404 | 82 | 9,024 | 4.60 415 |
| S. C-- | 5,240 | 8,676 | 4.48 389 | 4,827 | 9,131 | 4.51 412 | 4,829 | 9,335 | 4.55 424 | 4,654 | 9,730 | 4.54 442 |
| S. DAK | 87 | 8,224 | 4.51 371 | 82 | 8,781 | 4.66 409 | 65 | 9,442 | 4.63 437 | 69 | 9,548 | 4.55 438 |
| TENN-- | 2,501 | 8,781 | 4.54 399 | 2,484 | 9,112 | 4.58 417 | 2,193 | 9,165 | 4.57 419 | 1,889 | 9,398 | 4.57 430 |
| TEX-- | 637 | 8,585 | 4.46 383 | 641 | 8,405 | 4.38 368 | 573 | 8,905 | 4.35 387 | 627 | 8,690 | 4.36 378 |
| UTAH-- | 329 | 8,743 | 4.58 401 | 294 | 9,403 | 4.57 430 | 248 | 9,065 | 4.42 400 | 266 | 8,967 | 4.49 403 |
| VT---- | 1,213 | 9,465 | 4.60 436 | 1,185 | 9,188 | 4.61 424 | 1,027 | 9,426 | 4.61 435 | 781 | 9,629 | 4.58 441 |
| VA---- | 6,229 | 8,961 | 4.72 423 | 5,546 | 9,023 | 4.71 425 | 4,858 | 9,289 | 4.70 437 | 4,347 | 9,452 | 4.69 444 |
| WASH-- | 2,633 | 10,268 | 4.74 487 | 2,813 | 10,498 | 4.74 497 | 3,300 | 10,493 | 4.70 494 | 3,452 | 10,802 | 4.71 509 |
| W. VA- | 515 | 8,830 | 4.56 402 | 568 | 9,046 | 4.62 418 | 579 | 9,101 | 4.63 422 | 585 | 8,824 | 4.62 408 |
| WIS-- | 10,264 | 9,144 | 4.70 430 | 9,907 | 9,393 | 4.71 442 | 9,701 | 9,515 | 4.68 445 | 9,251 | 9,596 | 4.68 449 |
| WYO-- | 16 | 10,096 | 4.76 481 | 20 | 10,651 | 4.61 491 | 20 | 10,514 | 4.61 485 | 29 | 11,263 | 4.58 515 |
| U. S.- | 126,682 | 9,282 | 4.66 433 | 120,652 | 9,449 | 4.66 440 | 117,500 | 9,551 | 4.65 444 | 112,146 | 9,712 | 4.63 450 |

TABLE 5.--AVERAGE YIELDS OF OFFICIAL OHIO COWS COOED AS HOLSTEIN BY STATE AND CALVING YEAR
ON A 2X, 305-DAY, M.E. BASIS

| STATE | 1 9 6 1 | | | | 1 9 6 2 | | | | 1 9 6 3 | | | | 1 9 6 4 | | | |
|--------|---------|--------|------|-----|---------|--------|------|-----|---------|--------|------|-----|-----------|--------|------|-----|
| | RECORDS | MILK | % | FAT | RECORDS | MILK | % | EAT | RECORDS | MILK | % | FAT | RECORDS | MILK | % | EAT |
| ALA-- | 6,008 | 10,152 | 3.51 | 356 | 7,058 | 10,399 | 3.50 | 363 | 9,329 | 10,582 | 3.52 | 372 | 12,351 | 11,080 | 3.51 | 388 |
| ALASKA | 24 | 13,960 | 3.63 | 506 | 31 | 13,050 | 3.51 | 458 | 62 | 12,654 | 3.55 | 450 | 98 | 12,111 | 3.56 | 431 |
| ARIZ-- | 2,156 | 14,215 | 3.45 | 490 | 2,053 | 13,632 | 3.46 | 471 | 2,269 | 13,521 | 3.44 | 465 | 2,764 | 14,011 | 3.40 | 476 |
| ARK-- | 1,540 | 10,290 | 3.41 | 351 | 2,023 | 9,982 | 3.40 | 339 | 2,069 | 11,087 | 3.39 | 376 | 2,249 | 12,002 | 3.32 | 398 |
| CALIF- | 2,937 | 16,185 | 3.53 | 572 | 4,165 | 16,443 | 3.51 | 578 | 16,326 | 15,787 | 3.55 | 560 | 41,629 | 15,697 | 3.56 | 559 |
| COLO-- | 1,733 | 13,397 | 3.57 | 479 | 2,458 | 13,546 | 3.51 | 476 | 2,978 | 13,941 | 3.44 | 479 | 3,789 | 14,244 | 3.49 | 497 |
| CONN-- | 8,770 | 13,596 | 3.65 | 497 | 11,031 | 14,156 | 3.67 | 519 | 12,621 | 14,196 | 3.68 | 523 | 15,389 | 14,758 | 3.70 | 546 |
| DEL-- | 2,286 | 11,936 | 3.60 | 430 | 2,769 | 12,742 | 3.66 | 467 | 2,933 | 13,153 | 3.66 | 482 | 3,328 | 13,095 | 3.68 | 482 |
| FLA-- | 1,058 | 11,863 | 3.56 | 422 | 1,459 | 11,884 | 3.59 | 426 | 2,606 | 11,810 | 3.54 | 418 | 4,445 | 12,108 | 3.47 | 420 |
| GA-- | 6,456 | 10,661 | 3.60 | 384 | 8,048 | 11,344 | 3.59 | 408 | 10,049 | 11,751 | 3.59 | 422 | 15,732 | 12,209 | 3.56 | 435 |
| HAWAII | *** | *** | *** | *** | *** | *** | *** | *** | 85 | 14,768 | 3.37 | 497 | 242 | 14,107 | 3.29 | 464 |
| IDAHO | 3,544 | 13,855 | 3.62 | 501 | 3,672 | 13,965 | 3.58 | 500 | 5,461 | 13,694 | 3.59 | 492 | 8,762 | 13,567 | 3.60 | 488 |
| ILL-- | 28,120 | 12,499 | 3.68 | 460 | 30,919 | 12,697 | 3.68 | 468 | 34,976 | 13,238 | 3.64 | 483 | 39,797 | 13,371 | 3.67 | 491 |
| IND-- | 20,014 | 12,506 | 3.64 | 455 | 22,574 | 12,807 | 3.64 | 466 | 25,623 | 13,373 | 3.63 | 486 | 29,343 | 13,490 | 3.64 | 491 |
| IOWA-- | 28,600 | 12,107 | 3.58 | 433 | 36,077 | 12,005 | 3.58 | 430 | 36,874 | 12,758 | 3.54 | 452 | 44,335 | 13,021 | 3.55 | 462 |
| KANS-- | 13,951 | 11,998 | 3.62 | 434 | 15,982 | 12,158 | 3.58 | 436 | 18,846 | 12,845 | 3.58 | 459 | 24,841 | 12,984 | 3.59 | 467 |
| KY---- | 5,743 | 11,958 | 3.57 | 427 | 7,262 | 12,145 | 3.56 | 432 | 8,903 | 12,322 | 3.56 | 439 | 12,027 | 12,267 | 3.55 | 436 |
| LA---- | 492 | 10,975 | 3.51 | 385 | 1,088 | 10,519 | 3.39 | 357 | 1,377 | 10,785 | 3.41 | 367 | 1,573 | 11,357 | 3.35 | 380 |
| MAINE- | 10,696 | 12,906 | 3.71 | 479 | 11,771 | 13,294 | 3.72 | 495 | 12,018 | 13,624 | 3.74 | 509 | 13,026 | 13,670 | 3.73 | 510 |
| MD---- | 16,450 | 11,993 | 3.68 | 441 | 23,186 | 12,289 | 3.70 | 455 | 26,970 | 12,496 | 3.69 | 461 | 24,680 | 12,596 | 3.70 | 466 |
| MASS-- | 12,720 | 13,075 | 3.71 | 485 | 14,280 | 13,469 | 3.71 | 500 | 15,744 | 13,340 | 3.70 | 494 | 16,530 | 14,006 | 3.70 | 519 |
| MICH-- | 48,173 | 12,644 | 3.58 | 452 | 54,549 | 13,029 | 3.58 | 467 | 63,455 | 13,397 | 3.59 | 481 | 68,207 | 13,582 | 3.59 | 488 |
| MINN-- | 44,658 | 12,529 | 3.57 | 447 | 56,598 | 12,264 | 3.58 | 439 | 58,619 | 12,820 | 3.56 | 456 | 78,348 | 13,209 | 3.58 | 473 |
| MISS-- | 883 | 10,500 | 3.56 | 374 | 1,189 | 9,927 | 3.52 | 350 | 2,268 | 10,024 | 3.55 | 356 | 4,755 | 10,172 | 3.53 | 359 |
| MO---- | 4,896 | 12,239 | 3.65 | 447 | 5,749 | 12,510 | 3.62 | 453 | 7,242 | 12,902 | 3.60 | 464 | 12,223 | 12,890 | 3.59 | 463 |
| MONT-- | 961 | 12,978 | 3.50 | 454 | 997 | 13,107 | 3.47 | 455 | 1,055 | 13,615 | 3.45 | 470 | 1,171 | 13,593 | 3.45 | 469 |
| NEBR-- | 4,618 | 12,051 | 3.61 | 436 | 6,593 | 11,799 | 3.59 | 424 | 7,247 | 12,352 | 3.58 | 442 | 10,130 | 12,889 | 3.60 | 464 |
| NEV-- | 645 | 12,708 | 3.25 | 413 | 874 | 13,334 | 3.28 | 438 | 956 | 13,488 | 3.30 | 446 | 1,041 | 14,094 | 3.30 | 466 |
| N. H-- | 5,587 | 13,026 | 3.78 | 492 | 7,600 | 13,006 | 3.78 | 492 | 8,476 | 13,218 | 3.77 | 499 | 8,761 | 13,788 | 3.76 | 519 |
| N. J-- | 9,654 | 12,737 | 3.64 | 464 | 11,494 | 13,582 | 3.66 | 497 | 13,258 | 13,651 | 3.67 | 501 | 19,154 | 13,731 | 3.64 | 501 |
| N. MEX | 165 | 14,007 | 3.50 | 490 | 299 | 14,259 | 3.54 | 505 | 1,158 | 15,344 | 3.43 | 525 | 1,488 | 14,858 | 3.44 | 511 |
| N. Y-- | 104,580 | 13,176 | 3.56 | 469 | 126,560 | 13,823 | 3.55 | 491 | 142,792 | 13,942 | 3.57 | 498 | 155,700 | 14,396 | 3.55 | 511 |
| N. C-- | 19,965 | 11,304 | 3.56 | 403 | 24,315 | 11,746 | 3.57 | 420 | 27,021 | 12,533 | 3.56 | 446 | 30,693 | 12,875 | 3.56 | 458 |
| N. DAK | 3,744 | 11,921 | 3.62 | 431 | 4,259 | 11,544 | 3.63 | 419 | 4,508 | 11,777 | 3.59 | 423 | 4,791 | 11,917 | 3.60 | 429 |
| OHIO-- | 23,508 | 13,006 | 3.55 | 462 | 32,419 | 13,387 | 3.56 | 476 | 49,325 | 13,730 | 3.59 | 492 | 59,573 | 13,748 | 3.58 | 493 |
| OKLA-- | 3,127 | 11,604 | 3.58 | 415 | 3,992 | 11,837 | 3.48 | 412 | 5,165 | 12,365 | 3.44 | 426 | 7,414 | 12,592 | 3.41 | 429 |
| OREG-- | 5,537 | 13,029 | 3.60 | 469 | 5,967 | 13,515 | 3.58 | 483 | 6,131 | 13,890 | 3.58 | 498 | 6,327 | 14,134 | 3.60 | 508 |
| PA---- | 71,427 | 12,782 | 3.69 | 471 | 105,568 | 13,484 | 3.70 | 500 | 110,921 | 13,660 | 3.72 | 508 | 121,412 | 13,765 | 3.72 | 512 |
| R. I-- | 1,101 | 12,602 | 3.68 | 465 | 1,208 | 13,242 | 3.72 | 493 | 1,384 | 13,377 | 3.76 | 504 | 1,453 | 13,886 | 3.75 | 521 |
| S. C-- | 6,385 | 10,786 | 3.51 | 378 | 7,501 | 11,161 | 3.53 | 394 | 8,537 | 11,599 | 3.58 | 415 | 10,230 | 11,930 | 3.58 | 427 |
| S. DAK | 1,772 | 12,411 | 3.46 | 430 | 2,630 | 11,673 | 3.50 | 409 | 4,721 | 12,146 | 3.47 | 422 | 5,609 | 12,545 | 3.46 | 435 |
| TENN-- | 1,931 | 12,268 | 3.60 | 442 | 3,680 | 11,691 | 3.62 | 423 | 5,860 | 11,709 | 3.62 | 424 | 11,506 | 11,979 | 3.63 | 435 |
| TEX-- | 8,653 | 11,602 | 3.49 | 405 | 9,583 | 11,877 | 3.45 | 410 | 10,896 | 12,105 | 3.43 | 417 | 14,378 | 12,603 | 3.46 | 436 |
| UTAH-- | 7,827 | 13,864 | 3.53 | 489 | 9,893 | 13,783 | 3.52 | 486 | 10,632 | 13,680 | 3.54 | 484 | 11,990 | 13,714 | 3.55 | 487 |
| VT---- | 13,458 | 12,724 | 3.65 | 465 | 15,785 | 12,986 | 3.68 | 478 | 18,848 | 13,243 | 3.66 | 485 | 22,481 | 13,713 | 3.65 | 500 |
| VA---- | 28,807 | 12,150 | 3.63 | 441 | 32,387 | 12,350 | 3.62 | 447 | 33,388 | 12,971 | 3.60 | 467 | 40,345 | 13,086 | 3.59 | 470 |
| WASH-- | 9,173 | 14,101 | 3.59 | 506 | 11,206 | 14,459 | 3.57 | 517 | 14,931 | 14,509 | 3.59 | 521 | 17,595 | 14,583 | 3.59 | 523 |
| W. VA- | 2,869 | 11,262 | 3.58 | 403 | 3,115 | 11,622 | 3.61 | 419 | 3,234 | 12,204 | 3.61 | 441 | 3,904 | 12,235 | 3.60 | 441 |
| WIS-- | 60,048 | 12,811 | 3.62 | 464 | 67,844 | 13,046 | 3.61 | 471 | 78,850 | 13,500 | 3.59 | 484 | 90,572 | 13,737 | 3.61 | 496 |
| WYO-- | 189 | 13,906 | 3.42 | 475 | 203 | 13,984 | 3.40 | 476 | 242 | 13,419 | 3.43 | 461 | 194 | 14,632 | 3.42 | 500 |
| U. S.- | 667,768 | 12,620 | 3.61 | 455 | 822,118 | 12,959 | 3.61 | 468 | 949,241 | 13,322 | 3.60 | 480 | 1,138,375 | 13,570 | 3.60 | 489 |

TABLE 6.--AVERAGE YIELDS OF OFFICIAL DHIA COWS CODED AS HOLSTEIN BY STATE AND CALVING YEAR
ON A 2X, 305-DAY, M.E. BASIS

| 1 9 6 5 | | | | | 1 9 6 6 | | | | | 1 9 6 7 | | | | | 1 9 6 8 | | | | |
|---------|---------|--------|------|-----|---------|--------|------|-----|---------|---------|------|-----|---------|--------|---------|-----|--|--|--|
| STATE | RECORDS | MILK | % | FAT | RECORDS | MILK | % | FAT | RECORDS | MILK | % | FAT | RECORDS | MILK | % | FAT | | | |
| ALA--- | 14,276 | 11,253 | 3.52 | 397 | 14,947 | 11,673 | 3.52 | 411 | 16,655 | 12,054 | 3.51 | 424 | 17,960 | 12,323 | 3.52 | 434 | | | |
| ALASKA | 98 | 12,822 | 3.61 | 464 | 87 | 13,298 | 3.63 | 483 | 84 | 13,625 | 3.47 | 472 | 84 | 13,623 | 3.50 | 477 | | | |
| ARIZ-- | 3,126 | 14,432 | 3.43 | 495 | 3,797 | 14,863 | 3.46 | 514 | 4,545 | 15,122 | 3.35 | 506 | 5,285 | 15,463 | 3.33 | 516 | | | |
| ARK-- | 2,322 | 12,508 | 3.31 | 414 | 2,520 | 12,996 | 3.36 | 436 | 3,195 | 13,068 | 3.35 | 437 | 3,414 | 12,989 | 3.34 | 434 | | | |
| CALIF- | 52,464 | 15,773 | 3.57 | 564 | 53,896 | 15,933 | 3.55 | 566 | 55,879 | 15,990 | 3.55 | 567 | 72,539 | 16,308 | 3.56 | 580 | | | |
| COLO-- | 4,723 | 14,027 | 3.53 | 496 | 5,157 | 14,400 | 3.52 | 506 | 6,033 | 14,558 | 3.53 | 514 | 9,939 | 14,776 | 3.54 | 523 | | | |
| CONN-- | 15,437 | 14,841 | 3.67 | 545 | 17,438 | 14,689 | 3.69 | 543 | 17,912 | 14,800 | 3.67 | 543 | 18,611 | 15,126 | 3.62 | 548 | | | |
| DEL-- | 3,360 | 13,290 | 3.66 | 491 | 3,178 | 13,430 | 3.70 | 497 | 3,276 | 13,191 | 3.71 | 489 | 3,587 | 13,471 | 3.72 | 501 | | | |
| FLA--- | 6,713 | 12,214 | 3.47 | 424 | 8,123 | 12,213 | 3.41 | 417 | 8,268 | 12,777 | 3.38 | 431 | 8,326 | 12,566 | 3.37 | 423 | | | |
| GA---- | 18,848 | 12,236 | 3.57 | 437 | 20,053 | 12,572 | 3.59 | 451 | 20,881 | 12,904 | 3.61 | 466 | 21,334 | 13,127 | 3.61 | 473 | | | |
| HAWAII | 812 | 14,176 | 3.21 | 454 | 2,434 | 13,297 | 3.20 | 425 | 3,043 | 12,311 | 3.20 | 394 | 1,973 | 12,488 | 3.15 | 393 | | | |
| IDAHO- | 13,055 | 13,515 | 3.59 | 485 | 12,971 | 14,292 | 3.58 | 512 | 17,689 | 14,088 | 3.58 | 504 | 19,703 | 14,133 | 3.59 | 508 | | | |
| ILL-- | 40,779 | 13,401 | 3.65 | 489 | 41,298 | 13,562 | 3.66 | 497 | 39,909 | 13,610 | 3.66 | 499 | 41,315 | 13,781 | 3.67 | 506 | | | |
| IND-- | 29,444 | 13,646 | 3.63 | 495 | 25,579 | 13,945 | 3.65 | 510 | 29,717 | 13,852 | 3.66 | 506 | 28,567 | 13,771 | 3.65 | 503 | | | |
| IOWA-- | 46,855 | 12,724 | 3.56 | 453 | 45,319 | 13,069 | 3.58 | 468 | 47,118 | 13,340 | 3.58 | 478 | 49,666 | 13,191 | 3.61 | 476 | | | |
| KANS-- | 28,187 | 13,021 | 3.57 | 465 | 28,981 | 13,499 | 3.58 | 484 | 31,763 | 13,677 | 3.59 | 491 | 33,323 | 13,782 | 3.59 | 495 | | | |
| KY---- | 14,272 | 12,435 | 3.55 | 441 | 14,723 | 12,677 | 3.56 | 451 | 15,203 | 12,961 | 3.55 | 460 | 15,943 | 13,104 | 3.54 | 464 | | | |
| LA---- | 1,851 | 11,656 | 3.36 | 392 | 2,476 | 11,957 | 3.29 | 393 | 2,684 | 12,067 | 3.37 | 406 | 3,524 | 12,760 | 3.37 | 430 | | | |
| MAINE- | 12,761 | 14,011 | 3.70 | 519 | 14,181 | 13,881 | 3.72 | 516 | 15,036 | 13,897 | 3.67 | 511 | 14,953 | 14,240 | 3.66 | 521 | | | |
| MD---- | 22,122 | 12,980 | 3.74 | 486 | 27,357 | 13,097 | 3.76 | 492 | 27,894 | 13,136 | 3.73 | 490 | 30,067 | 13,545 | 3.72 | 504 | | | |
| MASS-- | 15,432 | 14,187 | 3.72 | 527 | 15,382 | 14,044 | 3.75 | 526 | 15,228 | 13,997 | 3.73 | 522 | 15,405 | 14,444 | 3.72 | 537 | | | |
| MICH-- | 66,689 | 13,605 | 3.58 | 487 | 62,918 | 13,604 | 3.58 | 488 | 61,073 | 13,520 | 3.60 | 487 | 62,562 | 13,658 | 3.60 | 492 | | | |
| MINN-- | 88,898 | 12,732 | 3.61 | 460 | 91,996 | 13,184 | 3.62 | 477 | 99,274 | 13,705 | 3.61 | 494 | 106,892 | 13,648 | 3.61 | 493 | | | |
| MISS-- | 6,671 | 10,897 | 3.51 | 383 | 7,673 | 11,406 | 3.50 | 400 | 8,833 | 11,890 | 3.48 | 414 | 9,697 | 12,262 | 3.49 | 428 | | | |
| MO---- | 14,993 | 13,085 | 3.57 | 467 | 16,919 | 13,381 | 3.56 | 477 | 19,218 | 13,487 | 3.54 | 478 | 21,890 | 13,340 | 3.57 | 476 | | | |
| MONT-- | 1,568 | 13,299 | 3.45 | 458 | 1,764 | 14,122 | 3.39 | 479 | 1,541 | 14,313 | 3.42 | 489 | 1,656 | 14,267 | 3.46 | 494 | | | |
| NEBR-- | 11,969 | 12,588 | 3.57 | 450 | 12,798 | 13,171 | 3.57 | 471 | 14,873 | 13,203 | 3.58 | 473 | 16,499 | 13,062 | 3.62 | 473 | | | |
| NEV-- | 1,025 | 14,838 | 3.33 | 494 | 756 | 15,140 | 3.35 | 508 | 731 | 14,956 | 3.32 | 497 | 903 | 15,327 | 3.36 | 515 | | | |
| N. H-- | 8,691 | 13,930 | 3.74 | 521 | 9,121 | 14,000 | 3.74 | 523 | 9,372 | 13,816 | 3.72 | 514 | 8,980 | 14,094 | 3.70 | 522 | | | |
| N. J-- | 19,427 | 14,224 | 3.64 | 518 | 20,236 | 14,362 | 3.64 | 523 | 20,454 | 13,927 | 3.64 | 508 | 19,778 | 14,265 | 3.63 | 519 | | | |
| N. MEX | 1,845 | 14,610 | 3.41 | 498 | 2,635 | 14,606 | 3.39 | 496 | 3,140 | 14,7C9 | 3.39 | 499 | 5,393 | 14,699 | 3.39 | 498 | | | |
| N. Y-- | 151,614 | 14,539 | 3.56 | 517 | 157,886 | 14,515 | 3.57 | 519 | 165,608 | 14,435 | 3.57 | 516 | 168,743 | 14,723 | 3.56 | 524 | | | |
| N. C-- | 33,557 | 12,988 | 3.58 | 464 | 34,147 | 13,469 | 3.58 | 482 | 36,012 | 13,691 | 3.60 | 492 | 37,823 | 13,948 | 3.61 | 504 | | | |
| N. DAK | 4,269 | 11,949 | 3.60 | 430 | 4,457 | 12,351 | 3.63 | 449 | 4,765 | 12,787 | 3.56 | 456 | 5,004 | 12,978 | 3.62 | 470 | | | |
| OHIO-- | 62,266 | 13,865 | 3.57 | 495 | 56,437 | 13,990 | 3.59 | 503 | 62,865 | 13,807 | 3.61 | 498 | 63,883 | 13,691 | 3.62 | 496 | | | |
| OKLA-- | 8,587 | 12,680 | 3.43 | 435 | 9,968 | 13,167 | 3.44 | 453 | 12,659 | 12,981 | 3.47 | 450 | 15,244 | 13,137 | 3.49 | 459 | | | |
| OREG-- | 8,612 | 14,291 | 3.61 | 516 | 8,977 | 14,654 | 3.62 | 530 | 13,128 | 14,682 | 3.64 | 534 | 13,782 | 14,568 | 3.68 | 536 | | | |
| PA---- | 132,211 | 13,979 | 3.70 | 518 | 126,796 | 14,097 | 3.72 | 525 | 130,603 | 13,798 | 3.73 | 514 | 116,103 | 14,177 | 3.71 | 526 | | | |
| R. I-- | 1,385 | 13,865 | 3.71 | 515 | 1,436 | 14,266 | 3.65 | 521 | 1,532 | 13,893 | 3.68 | 511 | 1,630 | 14,191 | 3.63 | 516 | | | |
| S. C-- | 11,218 | 12,353 | 3.60 | 444 | 11,704 | 12,740 | 3.62 | 461 | 12,839 | 13,025 | 3.64 | 473 | 14,258 | 13,159 | 3.62 | 476 | | | |
| S. DAK | 5,326 | 12,648 | 3.50 | 443 | 5,087 | 13,551 | 3.53 | 479 | 5,407 | 13,874 | 3.56 | 494 | 5,915 | 13,644 | 3.57 | 488 | | | |
| TENN-- | 14,515 | 12,091 | 3.62 | 438 | 15,768 | 12,267 | 3.60 | 442 | 16,264 | 12,657 | 3.60 | 456 | 18,067 | 12,898 | 3.61 | 465 | | | |
| TEX-- | 16,916 | 12,655 | 3.47 | 440 | 18,166 | 12,926 | 3.44 | 445 | 19,888 | 13,189 | 3.44 | 453 | 19,919 | 13,314 | 3.44 | 458 | | | |
| UTAH-- | 13,941 | 13,612 | 3.54 | 482 | 14,364 | 14,127 | 3.53 | 499 | 15,294 | 13,872 | 3.55 | 493 | 15,286 | 14,023 | 3.53 | 495 | | | |
| VT---- | 24,097 | 14,044 | 3.60 | 506 | 26,690 | 13,747 | 3.61 | 497 | 28,543 | 13,813 | 3.59 | 497 | 29,213 | 14,173 | 3.58 | 507 | | | |
| VA---- | 45,976 | 13,103 | 3.60 | 472 | 45,499 | 13,366 | 3.59 | 480 | 46,385 | 13,566 | 3.61 | 489 | 49,224 | 13,723 | 3.60 | 495 | | | |
| WASH-- | 19,397 | 14,677 | 3.58 | 526 | 20,551 | 14,852 | 3.58 | 532 | 28,227 | 14,896 | 3.59 | 534 | 33,507 | 15,135 | 3.60 | 546 | | | |
| W. VA- | 5,166 | 12,259 | 3.60 | 441 | 6,320 | 12,757 | 3.59 | 458 | 6,816 | 13,119 | 3.62 | 474 | 7,838 | 13,340 | 3.62 | 483 | | | |
| WIS--- | 94,025 | 13,512 | 3.63 | 490 | 95,438 | 13,758 | 3.65 | 502 | 98,365 | 13,954 | 3.65 | 509 | 102,563 | 13,989 | 3.66 | 512 | | | |
| WYO--- | 178 | 15,830 | 3.47 | 550 | 177 | 16,244 | 3.38 | 549 | 175 | 15,068 | 3.33 | 502 | 167 | 14,043 | 3.40 | 477 | | | |

TABLE 7.--AVERAGE YIELDS OF OFFICIAL DHIA COWS CODED AS JERSEY BY STATE AND CALVING YEAR
ON A 2X, 305-DAY, M.E. BASIS

TABLE 8.--AVERAGE YIELDS OF OFFICIAL OHI COWS CODED AS JERSEY BY STATE AND CALVING YEAR
ON A 2X, 305-DAY, M.E. BASIS

| 1 9 6 5 | | | | | 1 9 6 6 | | | | | 1 9 6 7 | | | | | 1 9 6 8 | | | | |
|---------|---------|--------|------|-----|---------|--------|------|-----|---------|---------|------|-----|---------|--------|---------|-----|--|--|--|
| STATE | RECORDS | MILK | % | FAT | RECORDS | MILK | % | FAT | RECORDS | MILK | % | FAT | RECORDS | MILK | % | FAT | | | |
| ALA--- | 6,043 | 7,456 | 4.80 | 358 | 5,923 | 7,857 | 4.76 | 374 | 5,448 | 7,958 | 4.68 | 373 | 5,464 | 8,127 | 4.70 | 382 | | | |
| ALASKA | ... | ... | ... | ... | 2 | 10,730 | 3.80 | 408 | 1 | 11,410 | 4.26 | 486 | 1 | 12,000 | 4.03 | 484 | | | |
| ARIZ-- | 122 | 9,325 | 4.65 | 433 | 106 | 10,877 | 4.69 | 511 | 388 | 9,951 | 4.73 | 471 | 671 | 9,792 | 4.62 | 453 | | | |
| ARK-- | 506 | 8,540 | 4.71 | 402 | 484 | 8,410 | 4.84 | 407 | 478 | 8,661 | 4.86 | 421 | 497 | 8,723 | 4.82 | 420 | | | |
| CALIF- | 6,045 | 9,628 | 5.04 | 485 | 6,134 | 9,650 | 5.00 | 482 | 6,386 | 9,729 | 5.01 | 487 | 7,960 | 10,027 | 5.02 | 503 | | | |
| COLO-- | 385 | 7,804 | 5.21 | 406 | 385 | 7,888 | 5.21 | 411 | 369 | 8,310 | 5.12 | 425 | 625 | 8,256 | 5.16 | 426 | | | |
| CONN-- | 623 | 9,381 | 5.20 | 488 | 588 | 9,281 | 5.12 | 475 | 555 | 9,481 | 5.12 | 485 | 515 | 9,887 | 5.04 | 499 | | | |
| OEL--- | 82 | 8,375 | 4.98 | 417 | 79 | 8,681 | 4.99 | 434 | 115 | 8,360 | 5.02 | 420 | 138 | 8,286 | 4.96 | 411 | | | |
| FLA--- | 3,592 | 8,552 | 4.67 | 400 | 3,423 | 8,437 | 4.68 | 395 | 3,030 | 8,666 | 4.65 | 403 | 3,013 | 8,292 | 4.57 | 379 | | | |
| GA--- | 2,941 | 8,381 | 4.90 | 411 | 2,868 | 8,496 | 4.97 | 422 | 2,727 | 8,661 | 4.99 | 432 | 2,584 | 8,659 | 4.98 | 431 | | | |
| HAWAII | 14 | 9,392 | 4.36 | 409 | 35 | 8,980 | 4.31 | 387 | 52 | 8,460 | 4.36 | 369 | 25 | 8,661 | 4.51 | 390 | | | |
| IDAHO- | 1,700 | 8,427 | 5.13 | 433 | 1,751 | 8,805 | 5.09 | 448 | 2,266 | 8,552 | 5.10 | 436 | 2,158 | 8,601 | 5.13 | 441 | | | |
| ILL-- | 1,854 | 8,488 | 5.11 | 434 | 1,864 | 8,617 | 5.11 | 440 | 1,692 | 8,574 | 5.08 | 436 | 1,574 | 8,581 | 5.06 | 434 | | | |
| IND-- | 2,324 | 8,327 | 5.05 | 420 | 2,154 | 8,428 | 5.09 | 429 | 2,021 | 8,340 | 5.08 | 424 | 1,849 | 8,144 | 5.08 | 414 | | | |
| IOWA-- | 2,424 | 7,902 | 5.15 | 407 | 2,401 | 8,181 | 5.12 | 419 | 2,563 | 8,285 | 5.10 | 423 | 2,603 | 8,252 | 5.14 | 424 | | | |
| KANS-- | 1,305 | 8,373 | 5.11 | 428 | 1,143 | 8,488 | 5.11 | 434 | 1,129 | 8,573 | 5.15 | 442 | 994 | 8,704 | 5.08 | 442 | | | |
| KY---- | 2,646 | 7,996 | 5.00 | 400 | 2,703 | 8,234 | 5.03 | 414 | 2,621 | 8,366 | 5.01 | 419 | 2,414 | 8,522 | 4.99 | 426 | | | |
| LA---- | 996 | 7,304 | 4.62 | 339 | 1,247 | 7,840 | 4.65 | 366 | 1,511 | 8,012 | 4.70 | 377 | 1,624 | 8,168 | 4.62 | 378 | | | |
| MAINE- | 1,779 | 9,447 | 5.07 | 479 | 1,744 | 9,291 | 5.07 | 471 | 1,833 | 9,382 | 4.99 | 469 | 1,775 | 9,569 | 4.94 | 472 | | | |
| MO---- | 701 | 7,595 | 5.26 | 399 | 811 | 7,726 | 5.28 | 408 | 702 | 7,803 | 5.28 | 412 | 587 | 8,143 | 5.25 | 427 | | | |
| MASS-- | 1,658 | 9,546 | 5.17 | 493 | 1,729 | 9,484 | 5.23 | 497 | 1,718 | 9,294 | 5.22 | 485 | 1,497 | 9,549 | 5.17 | 494 | | | |
| MICH-- | 2,956 | 8,377 | 5.17 | 433 | 2,756 | 8,420 | 5.21 | 439 | 2,408 | 8,329 | 5.20 | 433 | 2,486 | 8,365 | 5.24 | 438 | | | |
| MINN-- | 2,502 | 8,015 | 5.10 | 409 | 2,537 | 8,269 | 5.09 | 421 | 2,669 | 8,566 | 5.09 | 436 | 2,684 | 8,645 | 5.07 | 439 | | | |
| MISS-- | 3,885 | 7,569 | 4.76 | 361 | 3,955 | 7,765 | 4.80 | 373 | 4,244 | 7,936 | 4.79 | 380 | 4,319 | 8,223 | 4.79 | 394 | | | |
| MO---- | 1,910 | 8,629 | 5.10 | 440 | 2,016 | 8,907 | 5.09 | 453 | 2,340 | 9,039 | 5.07 | 459 | 2,349 | 8,900 | 5.06 | 451 | | | |
| MONT-- | 48 | 9,364 | 5.35 | 501 | 70 | 9,527 | 5.26 | 502 | 68 | 9,716 | 5.23 | 509 | 54 | 9,135 | 5.27 | 482 | | | |
| NEBR-- | 246 | 8,338 | 5.08 | 424 | 295 | 8,573 | 4.98 | 427 | 245 | 8,462 | 5.02 | 425 | 210 | 8,689 | 4.96 | 431 | | | |
| NEV-- | 608 | 10,337 | 4.92 | 508 | 609 | 10,238 | 4.90 | 502 | 633 | 10,414 | 4.89 | 509 | 738 | 10,197 | 4.91 | 501 | | | |
| N. H-- | 1,455 | 9,314 | 5.06 | 472 | 1,406 | 9,280 | 5.09 | 472 | 1,340 | 9,476 | 5.07 | 480 | 1,224 | 9,708 | 5.10 | 495 | | | |
| N. J-- | 858 | 10,224 | 5.06 | 518 | 801 | 9,924 | 5.07 | 504 | 709 | 10,183 | 5.04 | 514 | 704 | 10,404 | 5.02 | 523 | | | |
| N. MEX | 138 | 10,760 | 4.52 | 487 | 130 | 10,901 | 4.40 | 481 | 135 | 10,086 | 4.47 | 453 | 148 | 9,228 | 4.64 | 430 | | | |
| N. Y-- | 5,404 | 9,118 | 5.12 | 467 | 5,291 | 9,056 | 5.13 | 465 | 5,244 | 8,982 | 5.11 | 459 | 4,917 | 9,194 | 5.09 | 468 | | | |
| N. C-- | 3,159 | 8,221 | 4.94 | 406 | 3,108 | 8,538 | 4.99 | 426 | 3,183 | 8,497 | 5.06 | 430 | 3,367 | 8,594 | 5.02 | 432 | | | |
| N. DAK | 27 | 6,766 | 5.45 | 368 | 46 | 5,629 | 4.88 | 275 | 31 | 5,560 | 4.92 | 273 | 15 | 7,505 | 4.56 | 342 | | | |
| OHIO-- | 8,005 | 8,658 | 5.08 | 440 | 7,430 | 8,570 | 5.10 | 437 | 7,130 | 8,549 | 5.11 | 437 | 6,595 | 8,576 | 5.11 | 438 | | | |
| OKLA-- | 821 | 8,160 | 4.98 | 406 | 826 | 8,551 | 4.99 | 426 | 835 | 8,441 | 4.91 | 414 | 768 | 8,044 | 4.97 | 400 | | | |
| OREG-- | 3,436 | 9,378 | 5.06 | 474 | 3,165 | 9,698 | 5.06 | 491 | 4,546 | 9,475 | 5.06 | 479 | 4,879 | 9,501 | 5.10 | 485 | | | |
| PA---- | 5,166 | 8,984 | 5.11 | 459 | 4,901 | 8,885 | 5.13 | 455 | 4,892 | 8,765 | 5.11 | 448 | 4,233 | 9,028 | 5.08 | 458 | | | |
| R. I-- | 95 | 9,724 | 5.20 | 506 | 84 | 9,400 | 5.22 | 491 | 78 | 8,677 | 5.21 | 454 | 69 | 9,474 | 5.09 | 483 | | | |
| S. C-- | 2,826 | 8,638 | 5.02 | 434 | 3,005 | 9,052 | 5.02 | 455 | 3,104 | 9,260 | 5.08 | 471 | 3,614 | 9,368 | 5.10 | 478 | | | |
| S. OAK | 139 | 7,966 | 5.26 | 419 | 129 | 8,372 | 5.28 | 442 | 126 | 8,698 | 5.35 | 465 | 131 | 8,430 | 5.28 | 445 | | | |
| TENN-- | 6,114 | 8,234 | 4.84 | 399 | 6,022 | 8,500 | 4.84 | 412 | 5,624 | 8,582 | 4.86 | 418 | 5,367 | 8,751 | 4.85 | 425 | | | |
| TEX-- | 4,281 | 8,097 | 4.83 | 391 | 4,435 | 8,252 | 4.79 | 395 | 4,363 | 8,428 | 4.80 | 405 | 3,862 | 8,446 | 4.73 | 400 | | | |
| UTAH-- | 1,234 | 8,356 | 4.96 | 414 | 1,074 | 8,747 | 4.91 | 429 | 1,158 | 8,444 | 4.96 | 418 | 1,328 | 8,571 | 4.94 | 423 | | | |
| VT---- | 6,051 | 9,145 | 5.08 | 465 | 5,980 | 9,009 | 5.10 | 459 | 6,237 | 9,011 | 5.06 | 456 | 6,016 | 9,182 | 5.04 | 462 | | | |
| VA---- | 1,518 | 8,610 | 5.11 | 440 | 1,509 | 8,790 | 5.10 | 448 | 1,576 | 8,815 | 5.06 | 446 | 1,474 | 8,907 | 5.10 | 454 | | | |
| WASH-- | 2,884 | 9,211 | 5.18 | 477 | 3,200 | 9,705 | 5.12 | 497 | 3,910 | 9,757 | 5.10 | 497 | 3,988 | 9,876 | 5.13 | 507 | | | |
| W. VA- | 478 | 8,509 | 5.03 | 428 | 564 | 8,466 | 5.03 | 426 | 613 | 8,564 | 5.05 | 433 | 608 | 8,932 | 5.07 | 452 | | | |
| WIS-- | 2,539 | 8,494 | 5.15 | 438 | 2,566 | 8,721 | 5.16 | 450 | 2,295 | 8,799 | 5.12 | 450 | 2,261 | 8,923 | 5.07 | 452 | | | |
| WYO--- | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | | | | |
| U. S.- | 106,523 | 8,593 | 5.01 | 431 | 105,484 | 8,718 | 5.01 | 437 | 107,241 | 8,786 | 5.01 | 440 | 106,976 | 8,914 | 5.00 | 445 | | | |

TABLE 9.--AVERAGE YIELDS OF OFFICIAL DHIA COWS CODED AS BROWN SWISS BY STATE AND CALVING YEAR
ON A 2X, 305-DAY, M.E. BASIS

| STATE | 1 9 6 1 | | | | 1 9 6 2 | | | | 1 9 6 3 | | | | 1 9 6 4 | | | |
|--------|---------|--------|------|-----|---------|--------|------|-----|---------|--------|------|-----|---------|--------|------|-----|
|  | RECORDS | MILK | % | FAT | RECORDS | MILK | % | FAT | RECORDS | MILK | % | FAT | RECORDS | MILK | % | FAT |
| ALA--- | 206 | 9,371 | 3.91 | 366 | 221 | 9,033 | 3.95 | 357 | 291 | 9,710 | 3.92 | 380 | 408 | 10,133 | 3.92 | 397 |
| ALASKA | ... | ... | ... | ... | 1 | 15,180 | 4.12 | 626 | 40 | 14,984 | 3.80 | 570 | 42 | 14,455 | 3.58 | 518 |
| ARIZ-- | 112 | 13,102 | 3.94 | 516 | 155 | 12,337 | 3.91 | 482 | 174 | 11,076 | 3.95 | 438 | 230 | 11,185 | 3.87 | 433 |
| ARK-- | 12 | 9,761 | 3.78 | 369 | 17 | 9,382 | 3.74 | 351 | 20 | 9,633 | 3.86 | 373 | 29 | 11,900 | 3.80 | 452 |
| CALIF- | ... | ... | ... | ... | 1 | 19,050 | 3.68 | 701 | 132 | 13,691 | 4.01 | 549 | 473 | 14,172 | 3.93 | 556 |
| COLO-- | 246 | 12,186 | 4.15 | 505 | 395 | 12,116 | 4.09 | 496 | 375 | 11,963 | 4.05 | 484 | 331 | 12,546 | 4.09 | 514 |
| CONN-- | 321 | 12,781 | 4.16 | 531 | 356 | 13,266 | 4.16 | 552 | 349 | 12,855 | 4.17 | 537 | 385 | 12,991 | 4.20 | 546 |
| OEL--- | 15 | 9,024 | 4.12 | 370 | 22 | 11,062 | 4.24 | 469 | 24 | 10,202 | 4.11 | 419 | 14 | 10,159 | 3.68 | 374 |
| FLA-- | 44 | 11,929 | 3.94 | 471 | 84 | 11,911 | 3.84 | 457 | 237 | 11,749 | 3.88 | 456 | 328 | 12,166 | 3.78 | 460 |
| GA-- | 146 | 9,403 | 4.03 | 379 | 181 | 10,284 | 3.97 | 408 | 269 | 10,896 | 3.95 | 430 | 492 | 11,512 | 3.91 | 450 |
| HAWAII | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| IOAHO- | 83 | 11,919 | 3.92 | 467 | 78 | 11,963 | 3.96 | 474 | 87 | 11,381 | 4.02 | 457 | 93 | 11,291 | 4.02 | 454 |
| ILL-- | 1,761 | 11,012 | 4.08 | 449 | 1,839 | 11,216 | 4.07 | 457 | 1,972 | 11,901 | 4.06 | 483 | 2,157 | 12,063 | 4.09 | 494 |
| IND-- | 693 | 11,446 | 3.57 | 455 | 897 | 11,838 | 3.99 | 472 | 978 | 12,317 | 4.02 | 495 | 1,090 | 12,400 | 4.03 | 500 |
| IOWA-- | 2,643 | 10,583 | 4.02 | 425 | 3,127 | 10,767 | 3.99 | 430 | 3,028 | 11,428 | 3.99 | 455 | 3,251 | 11,760 | 3.97 | 467 |
| KANS-- | 509 | 10,182 | 4.09 | 417 | 590 | 10,244 | 4.03 | 413 | 612 | 10,752 | 3.99 | 430 | 654 | 10,923 | 4.03 | 440 |
| KY---- | 205 | 10,164 | 4.02 | 408 | 261 | 9,990 | 3.96 | 395 | 248 | 11,365 | 3.93 | 447 | 329 | 11,386 | 3.94 | 449 |
| LA---- | 12 | 11,454 | 4.00 | 455 | 18 | 11,581 | 3.63 | 420 | 21 | 11,565 | 3.67 | 425 | 31 | 12,531 | 3.68 | 461 |
| MAINE- | 54 | 10,584 | 4.00 | 424 | 66 | 11,102 | 4.00 | 444 | 75 | 12,099 | 4.02 | 486 | 65 | 11,640 | 4.05 | 471 |
| MD---- | 382 | 10,753 | 4.08 | 439 | 554 | 11,031 | 4.14 | 457 | 638 | 10,955 | 4.10 | 449 | 590 | 11,119 | 4.05 | 450 |
| MASS-- | 244 | 11,291 | 4.11 | 464 | 205 | 10,876 | 4.07 | 443 | 184 | 10,892 | 4.05 | 441 | 188 | 11,659 | 4.02 | 469 |
| MICH-- | 919 | 11,272 | 3.97 | 447 | 1,003 | 11,284 | 4.03 | 455 | 1,020 | 11,763 | 4.01 | 472 | 1,050 | 12,076 | 4.00 | 483 |
| MINN-- | 1,313 | 11,009 | 3.92 | 431 | 1,468 | 10,875 | 3.95 | 430 | 1,634 | 11,137 | 3.93 | 437 | 1,910 | 11,550 | 3.93 | 454 |
| MISS-- | 53 | 8,158 | 3.92 | 320 | 59 | 8,092 | 3.81 | 307 | 92 | 7,941 | 3.84 | 305 | 57 | 9,476 | 3.99 | 379 |
| MO---- | 172 | 10,722 | 3.86 | 414 | 177 | 11,423 | 3.89 | 444 | 194 | 11,253 | 3.93 | 442 | 347 | 10,421 | 4.01 | 418 |
| MONT-- | 41 | 12,157 | 4.16 | 506 | 49 | 11,859 | 4.18 | 496 | 44 | 12,635 | 4.13 | 522 | 59 | 12,551 | 4.14 | 520 |
| NEBR-- | 259 | 10,122 | 3.99 | 404 | 313 | 10,548 | 3.97 | 419 | 426 | 10,860 | 4.01 | 435 | 493 | 11,205 | 4.01 | 450 |
| NEV-- | 3 | 10,457 | 3.50 | 366 | 3 | 12,813 | 3.42 | 439 | 2 | 14,335 | 3.66 | 525 | 7 | 11,351 | 3.95 | 448 |
| N. H-- | 53 | 11,198 | 4.05 | 454 | 81 | 11,287 | 4.09 | 462 | 84 | 11,710 | 4.07 | 477 | 96 | 11,584 | 4.02 | 466 |
| N. J-- | 322 | 11,520 | 4.08 | 471 | 389 | 11,803 | 4.11 | 485 | 435 | 12,097 | 4.10 | 496 | 526 | 12,363 | 4.10 | 507 |
| N. MEX | 1 | 14,650 | 5.02 | 736 | ... | ... | ... | ... | 1 | 7,120 | 4.51 | 321 | ... | ... | ... | ... |
| N. Y-- | 2,178 | 11,472 | 4.02 | 461 | 2,276 | 12,212 | 4.04 | 493 | 2,299 | 12,156 | 4.05 | 492 | 2,362 | 12,522 | 4.03 | 505 |
| N. C-- | 385 | 9,582 | 3.97 | 380 | 338 | 9,999 | 3.99 | 399 | 418 | 10,594 | 3.95 | 418 | 504 | 10,751 | 3.92 | 421 |
| N. OAK | 237 | 9,226 | 4.07 | 375 | 329 | 9,711 | 4.07 | 396 | 302 | 10,436 | 4.04 | 422 | 296 | 10,933 | 3.93 | 429 |
| OHIO-- | 1,591 | 11,441 | 4.08 | 467 | 1,753 | 11,818 | 4.10 | 484 | 2,352 | 12,407 | 4.12 | 512 | 2,719 | 12,364 | 4.12 | 509 |
| OKLA-- | 76 | 8,875 | 3.90 | 346 | 30 | 9,053 | 3.93 | 356 | 63 | 9,877 | 3.87 | 382 | 123 | 10,808 | 3.83 | 414 |
| OREG-- | 392 | 10,847 | 3.99 | 433 | 349 | 11,778 | 3.92 | 462 | 389 | 11,234 | 3.98 | 447 | 340 | 12,244 | 3.97 | 487 |
| PA---- | 764 | 11,057 | 4.06 | 449 | 1,044 | 11,630 | 4.12 | 480 | 1,102 | 11,766 | 4.11 | 484 | 1,190 | 11,848 | 4.10 | 486 |
| R. I-- | 3 | 12,493 | 3.87 | 485 | 1 | 9,340 | 4.51 | 421 | 1 | 9,650 | 4.46 | 430 | 1 | 9,450 | 4.18 | 395 |
| S. C-- | 419 | 10,297 | 3.86 | 398 | 569 | 10,592 | 3.93 | 416 | 611 | 11,079 | 3.92 | 435 | 630 | 11,484 | 3.88 | 446 |
| S. OAK | 118 | 10,527 | 4.09 | 431 | 179 | 10,492 | 4.05 | 425 | 270 | 10,864 | 4.00 | 435 | 273 | 11,213 | 3.95 | 443 |
| TENN-- | 48 | 12,051 | 3.93 | 473 | 132 | 10,582 | 3.87 | 409 | 241 | 10,677 | 3.96 | 423 | 590 | 10,436 | 4.01 | 418 |
| TEX-- | 314 | 10,433 | 3.81 | 397 | 315 | 11,200 | 3.72 | 416 | 386 | 11,685 | 3.77 | 440 | 345 | 12,357 | 3.85 | 476 |
| UTAH-- | 23 | 12,647 | 4.01 | 507 | 20 | 12,892 | 4.06 | 524 | 22 | 13,197 | 3.86 | 509 | 23 | 13,486 | 4.01 | 541 |
| VT---- | 344 | 12,181 | 4.03 | 491 | 334 | 12,460 | 4.07 | 507 | 371 | 12,440 | 4.07 | 506 | 410 | 12,133 | 4.08 | 495 |
| VA---- | 191 | 11,793 | 4.04 | 476 | 276 | 10,497 | 4.07 | 427 | 281 | 11,945 | 4.05 | 483 | 355 | 11,820 | 4.06 | 480 |
| WASH-- | 180 | 12,250 | 4.03 | 493 | 212 | 11,788 | 4.10 | 483 | 230 | 12,368 | 4.07 | 503 | 278 | 12,289 | 4.04 | 497 |
| W. VA- | 5 | 8,248 | 4.02 | 331 | 2 | 9,660 | 3.71 | 358 | 6 | 9,830 | 3.79 | 375 | 12 | 9,645 | 4.02 | 388 |
| WIS-- | 2,143 | 11,126 | 4.00 | 445 | 2,326 | 11,398 | 4.02 | 458 | 2,412 | 11,684 | 3.99 | 466 | 2,616 | 11,945 | 4.00 | 478 |
| WYO-- | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| U. S.- | 20,237 | 11,022 | 4.02 | 443 | 23,100 | 11,279 | 4.03 | 454 | 25,442 | 11,647 | 4.02 | 468 | 28,792 | 11,885 | 4.01 | 477 |

TABLE 10.--AVERAGE YIELDS OF OFFICIAL DHIA COWS CODED AS BRDWN SWISS BY STATE AND CALVING YEAR
ON A 2X, 305-DAY, M.E. BASIS

| STATE | RECORDS | 1 9 6 5 | | | 1 9 6 6 | | | 1 9 6 7 | | | 1 9 6 8 | | | | | |
|--------|---------|---------|------|-----|---------|--------|------|---------|--------|--------|---------|-----|--------|--------|------|-----|
| | | MILK | % | FAT | MILK | % | FAT | MILK | % | FAT | MILK | % | FAT | | | |
| ALA--- | 462 | 10,456 | 3.92 | 410 | 481 | 11,236 | 3.90 | 438 | 593 | 11,677 | 3.85 | 450 | 628 | 11,948 | 3.80 | 455 |
| ALASKA | 30 | 13,061 | 3.68 | 480 | 18 | 14,806 | 3.74 | 554 | 18 | 13,287 | 3.76 | 499 | 13 | 12,257 | 3.85 | 472 |
| ARIZ-- | 236 | 12,292 | 3.94 | 484 | 151 | 10,857 | 3.80 | 412 | 83 | 11,063 | 3.74 | 414 | 79 | 14,529 | 3.85 | 563 |
| ARK-- | 69 | 12,569 | 3.92 | 494 | 82 | 12,737 | 3.98 | 507 | 67 | 13,359 | 3.90 | 521 | 73 | 12,533 | 3.77 | 473 |
| CALIF- | 519 | 14,140 | 3.96 | 559 | 516 | 14,553 | 3.90 | 567 | 486 | 14,283 | 3.91 | 558 | 581 | 14,223 | 3.97 | 565 |
| COLO-- | 320 | 12,545 | 4.08 | 512 | 308 | 12,144 | 4.16 | 505 | 295 | 12,453 | 4.14 | 515 | 363 | 12,910 | 4.04 | 521 |
| CONN-- | 330 | 12,894 | 4.16 | 536 | 385 | 12,792 | 4.16 | 532 | 378 | 12,508 | 4.12 | 515 | 378 | 13,232 | 4.08 | 540 |
| DEL-- | 25 | 11,238 | 3.89 | 440 | 32 | 11,305 | 3.87 | 438 | 45 | 10,925 | 3.75 | 412 | 38 | 11,548 | 3.81 | 441 |
| FLA--- | 434 | 12,266 | 3.80 | 466 | 552 | 11,713 | 3.76 | 440 | 401 | 12,354 | 3.71 | 459 | 444 | 11,826 | 3.79 | 449 |
| GA--- | 581 | 11,919 | 3.82 | 456 | 517 | 12,242 | 3.95 | 484 | 560 | 12,623 | 3.90 | 492 | 593 | 12,717 | 3.89 | 495 |
| HAWAII | 1 | 10,960 | 3.24 | 355 | 3 | 12,303 | 3.33 | 409 | 6 | 12,855 | 3.25 | 417 | 6 | 13,900 | 3.39 | 471 |
| IDAHO- | 114 | 12,342 | 4.07 | 502 | 132 | 12,839 | 4.03 | 517 | 156 | 12,576 | 3.99 | 502 | 169 | 12,022 | 3.99 | 481 |
| ILL-- | 2,039 | 11,973 | 4.07 | 488 | 1,991 | 11,882 | 4.09 | 486 | 1,889 | 11,757 | 4.09 | 481 | 1,878 | 11,672 | 4.11 | 480 |
| IND-- | 1,136 | 12,475 | 3.99 | 497 | 997 | 12,631 | 4.04 | 510 | 1,100 | 12,658 | 4.04 | 511 | 1,034 | 12,459 | 4.00 | 498 |
| IOWA-- | 3,195 | 11,625 | 3.99 | 464 | 2,871 | 11,952 | 4.00 | 478 | 3,139 | 12,052 | 3.99 | 481 | 3,368 | 11,823 | 4.01 | 474 |
| KANS-- | 730 | 10,831 | 3.99 | 432 | 688 | 11,368 | 4.04 | 460 | 796 | 11,730 | 4.03 | 472 | 939 | 11,595 | 4.03 | 467 |
| KY---- | 337 | 11,287 | 3.94 | 444 | 326 | 10,956 | 3.94 | 431 | 367 | 11,095 | 3.89 | 431 | 369 | 11,501 | 3.91 | 450 |
| LA---- | 35 | 13,021 | 3.64 | 473 | 66 | 11,406 | 3.61 | 411 | 63 | 11,990 | 3.70 | 444 | 82 | 11,965 | 3.72 | 445 |
| MAINE- | 48 | 12,154 | 4.01 | 487 | 46 | 11,344 | 4.05 | 459 | 53 | 10,379 | 4.13 | 429 | 48 | 10,637 | 3.97 | 422 |
| MD---- | 461 | 11,832 | 4.11 | 487 | 539 | 12,003 | 4.18 | 502 | 572 | 11,675 | 4.16 | 486 | 549 | 11,552 | 4.10 | 473 |
| MASS-- | 141 | 12,140 | 4.14 | 502 | 132 | 11,908 | 4.18 | 498 | 172 | 12,317 | 4.20 | 517 | 165 | 13,043 | 4.18 | 545 |
| MICH-- | 866 | 12,140 | 3.98 | 484 | 770 | 12,270 | 4.00 | 491 | 636 | 12,103 | 4.01 | 486 | 582 | 11,962 | 4.01 | 479 |
| MINN-- | 1,888 | 10,844 | 3.97 | 430 | 1,971 | 11,268 | 3.96 | 447 | 1,921 | 11,811 | 3.94 | 465 | 1,800 | 11,830 | 3.97 | 470 |
| MISS-- | 33 | 10,577 | 3.93 | 417 | 44 | 11,518 | 3.98 | 461 | 62 | 10,457 | 4.08 | 428 | 67 | 10,836 | 4.00 | 434 |
| MO---- | 318 | 11,053 | 3.97 | 438 | 395 | 11,440 | 3.99 | 457 | 531 | 11,181 | 3.92 | 439 | 565 | 10,687 | 3.97 | 425 |
| MONT-- | 60 | 12,268 | 4.10 | 502 | 87 | 11,926 | 4.17 | 498 | 77 | 13,813 | 4.20 | 580 | 114 | 14,099 | 4.10 | 578 |
| NEBR-- | 592 | 11,214 | 4.01 | 450 | 567 | 11,868 | 4.05 | 480 | 609 | 11,674 | 4.07 | 475 | 587 | 11,764 | 4.07 | 478 |
| NEV-- | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 17,735 | 3.53 | 627 |
| N. H-- | 128 | 11,359 | 3.95 | 449 | 147 | 12,052 | 3.94 | 475 | 146 | 11,009 | 4.01 | 442 | 147 | 11,777 | 3.93 | 463 |
| N. J-- | 520 | 12,975 | 4.18 | 543 | 530 | 13,342 | 4.17 | 557 | 497 | 13,196 | 4.11 | 542 | 479 | 13,093 | 4.09 | 535 |
| N. MEX | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 3 | 13,837 | 3.90 | 539 |
| N. Y-- | 1,957 | 12,726 | 4.05 | 515 | 2,003 | 12,629 | 4.07 | 514 | 1,906 | 12,774 | 4.06 | 519 | 1,901 | 13,070 | 4.02 | 526 |
| N. C-- | 516 | 11,186 | 3.94 | 440 | 508 | 11,682 | 3.91 | 457 | 502 | 12,159 | 3.93 | 478 | 518 | 12,536 | 3.93 | 493 |
| N. DAK | 223 | 10,824 | 3.98 | 431 | 147 | 12,212 | 4.05 | 495 | 153 | 12,363 | 4.08 | 504 | 167 | 12,598 | 4.18 | 527 |
| OHIO-- | 2,519 | 12,485 | 4.11 | 514 | 2,367 | 12,378 | 4.13 | 512 | 2,489 | 12,161 | 4.14 | 504 | 2,125 | 12,129 | 4.16 | 504 |
| OKLA-- | 132 | 11,506 | 3.85 | 444 | 210 | 11,457 | 3.77 | 432 | 230 | 12,259 | 3.86 | 473 | 241 | 12,457 | 3.92 | 489 |
| OREG-- | 336 | 13,139 | 4.04 | 531 | 374 | 13,835 | 4.07 | 563 | 576 | 13,608 | 4.06 | 552 | 660 | 13,784 | 4.09 | 564 |
| PA---- | 1,146 | 12,208 | 4.12 | 503 | 973 | 12,228 | 4.13 | 505 | 1,059 | 11,882 | 4.16 | 494 | 936 | 12,198 | 4.11 | 502 |
| R. I-- | ... | ... | ... | ... | ... | ... | ... | 1 | 12,150 | 4.35 | 529 | ... | ... | ... | ... | |
| S. C-- | 596 | 11,825 | 3.89 | 460 | 604 | 11,782 | 3.93 | 463 | 669 | 11,820 | 3.98 | 471 | 583 | 11,978 | 3.97 | 476 |
| S. DAK | 275 | 10,490 | 4.05 | 425 | 256 | 11,258 | 4.09 | 460 | 290 | 11,973 | 4.02 | 481 | 336 | 11,917 | 4.06 | 484 |
| TENN-- | 708 | 10,569 | 3.97 | 419 | 796 | 10,704 | 3.91 | 419 | 748 | 11,294 | 3.93 | 444 | 691 | 11,629 | 3.96 | 460 |
| TEX-- | 351 | 11,862 | 3.84 | 456 | 386 | 11,155 | 3.85 | 429 | 379 | 11,495 | 3.86 | 444 | 408 | 12,875 | 3.86 | 497 |
| UTAH-- | 52 | 12,715 | 3.94 | 500 | 54 | 12,578 | 3.93 | 494 | 80 | 13,552 | 3.90 | 528 | 83 | 13,575 | 3.82 | 519 |
| VT---- | 339 | 12,442 | 4.08 | 507 | 393 | 12,162 | 4.09 | 498 | 348 | 12,498 | 4.10 | 512 | 341 | 13,204 | 3.99 | 526 |
| VA---- | 463 | 12,052 | 4.03 | 486 | 518 | 12,495 | 3.99 | 499 | 571 | 12,436 | 4.00 | 497 | 618 | 12,497 | 4.00 | 500 |
| WASH-- | 337 | 12,314 | 4.05 | 499 | 388 | 13,281 | 4.04 | 537 | 477 | 13,927 | 4.00 | 557 | 469 | 14,142 | 3.99 | 564 |
| W. VA- | 15 | 9,604 | 3.97 | 381 | 20 | 11,213 | 4.06 | 455 | 20 | 10,279 | 4.02 | 413 | 32 | 11,191 | 3.94 | 440 |
| WIS-- | 2,575 | 11,539 | 4.00 | 462 | 2,402 | 11,846 | 4.00 | 475 | 2,492 | 12,052 | 4.01 | 484 | 2,516 | 11,991 | 4.03 | 484 |
| WYD-- | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | |
| U. S.- | 28,188 | 11,889 | 4.01 | 477 | 27,743 | 12,053 | 4.02 | 485 | 28,708 | 12,161 | 4.02 | 489 | 28,768 | 12,232 | 4.02 | 491 |

TABLE 11.--AVERAGE YIELDS OF OFFICIAL DHI COWS CODED AS MK.SHORTRN BY STATE AND CALVING YEAR
DN A 2X, 305-DAY, M.E. BASIS

| STATE | RECORDS | 1 9 6 1 | | | 1 9 6 2 | | | 1 9 6 3 | | | 1 9 6 4 | | | | | |
|--------|---------|---------|------|-----|---------|--------|------|---------|---------|--------|---------|-----|---------|--------|------|-----|
| | | MILK | % | FAT | RECORDS | MILK | % | FAT | RECORDS | MILK | % | FAT | RECORDS | MILK | % | FAT |
| ALA-- | 14 | 8,154 | 3.91 | 320 | 24 | 7,314 | 3.97 | 289 | 11 | 7,243 | 3.92 | 284 | 11 | 7,511 | 4.09 | 307 |
| ALASKA | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ARIZ-- | 1 | 12,400 | 4.55 | 564 | 1 | 12,010 | 4.62 | 555 | 1 | 10,220 | 4.25 | 434 | 1 | 10,000 | 4.52 | 452 |
| ARK-- | 50 | 8,853 | 3.87 | 342 | 80 | 9,091 | 3.77 | 342 | 66 | 9,311 | 3.47 | 323 | 79 | 10,595 | 3.47 | 368 |
| CALIF- | ... | ... | ... | ... | ... | ... | ... | ... | 3 | 12,880 | 4.14 | 533 | 5 | 10,668 | 4.10 | 437 |
| COLO-- | 23 | 8,064 | 3.70 | 298 | 41 | 8,413 | 3.62 | 304 | 56 | 7,987 | 3.53 | 282 | 54 | 8,714 | 3.55 | 310 |
| CONN-- | 1 | 7,210 | 3.76 | 271 | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 13,320 | 3.75 | 500 |
| DEL--- | 3 | 10,100 | 3.39 | 343 | 5 | 10,494 | 3.74 | 392 | 2 | 11,280 | 3.28 | 370 | ... | ... | ... | ... |
| FLA-- | ... | ... | ... | ... | ... | ... | ... | ... | 2 | 10,000 | 4.12 | 412 | 6 | 10,047 | 3.79 | 381 |
| GA--- | 5 | 8,216 | 3.97 | 326 | 15 | 8,634 | 4.00 | 346 | 15 | 8,195 | 3.79 | 310 | 16 | 9,159 | 3.86 | 354 |
| HAWAII | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| IDAHO- | 38 | 9,640 | 3.66 | 353 | 52 | 9,535 | 3.64 | 347 | 57 | 8,926 | 3.64 | 325 | 62 | 9,350 | 3.67 | 344 |
| ILL-- | 204 | 8,465 | 3.67 | 311 | 217 | 8,377 | 3.71 | 311 | 218 | 8,884 | 3.69 | 328 | 221 | 8,731 | 3.74 | 326 |
| IND--- | 142 | 9,477 | 3.71 | 352 | 137 | 9,866 | 3.76 | 371 | 166 | 9,963 | 3.71 | 369 | 151 | 10,433 | 3.70 | 386 |
| IDWA-- | 447 | 8,826 | 3.76 | 332 | 654 | 8,495 | 3.76 | 319 | 553 | 9,350 | 3.70 | 346 | 603 | 9,536 | 3.70 | 353 |
| KANS-- | 219 | 8,371 | 3.80 | 318 | 191 | 8,551 | 3.77 | 323 | 132 | 9,181 | 3.65 | 335 | 118 | 9,455 | 3.69 | 349 |
| KY---- | 2 | 9,810 | 3.89 | 382 | 5 | 8,930 | 3.55 | 316 | 3 | 8,217 | 3.91 | 321 | 3 | 8,383 | 3.65 | 306 |
| LA--- | ... | ... | ... | ... | 2 | 7,995 | 3.58 | 286 | 3 | 8,670 | 3.74 | 325 | 4 | 6,892 | 3.73 | 257 |
| MAINE- | 94 | 8,669 | 3.85 | 334 | 103 | 8,665 | 3.94 | 342 | 114 | 8,899 | 3.93 | 350 | 95 | 8,633 | 3.84 | 332 |
| MD---- | 70 | 8,504 | 3.91 | 332 | 76 | 8,824 | 3.95 | 348 | 59 | 8,096 | 3.90 | 316 | 56 | 8,739 | 3.91 | 342 |
| MASS-- | 59 | 7,791 | 3.91 | 305 | 52 | 7,781 | 3.67 | 287 | 55 | 7,621 | 3.71 | 282 | 82 | 8,541 | 3.69 | 314 |
| MICH-- | 162 | 9,170 | 3.62 | 332 | 121 | 9,688 | 3.57 | 346 | 103 | 9,388 | 3.57 | 335 | 73 | 9,248 | 3.59 | 333 |
| MINN-- | 294 | 8,283 | 3.80 | 314 | 422 | 8,266 | 3.76 | 311 | 440 | 9,062 | 3.70 | 335 | 496 | 9,474 | 3.62 | 343 |
| MISS-- | 2 | 7,975 | 4.19 | 335 | ... | ... | ... | ... | ... | ... | ... | ... | 3 | 7,543 | 3.78 | 285 |
| MD---- | 96 | 9,849 | 4.00 | 394 | 80 | 10,079 | 3.77 | 380 | 91 | 9,433 | 3.84 | 362 | 150 | 9,918 | 3.97 | 393 |
| MDNT-- | 34 | 6,910 | 4.03 | 279 | 30 | 6,968 | 3.89 | 271 | 19 | 8,139 | 3.97 | 323 | 15 | 7,475 | 4.05 | 302 |
| NE8R-- | 108 | 8,215 | 3.79 | 311 | 109 | 8,317 | 3.78 | 314 | 135 | 9,050 | 3.68 | 333 | 125 | 8,730 | 3.70 | 323 |
| NEV-- | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| N. H-- | 39 | 8,202 | 3.66 | 300 | 57 | 8,783 | 3.71 | 326 | 43 | 9,442 | 3.61 | 340 | 36 | 9,079 | 3.71 | 338 |
| N. J-- | ... | ... | ... | ... | 1 | 9,900 | 3.13 | 310 | 1 | 10,860 | 4.08 | 443 | 1 | 9,070 | 4.04 | 366 |
| N. MEX | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| N. Y-- | 121 | 9,168 | 3.74 | 343 | 132 | 9,953 | 3.65 | 363 | 140 | 9,239 | 3.61 | 333 | 82 | 9,958 | 3.62 | 360 |
| N. C-- | 2 | 8,135 | 3.74 | 304 | 8 | 8,689 | 4.00 | 348 | 7 | 8,880 | 3.87 | 344 | 4 | 10,830 | 3.84 | 416 |
| N. DAK | 80 | 9,276 | 3.68 | 342 | 72 | 8,631 | 3.84 | 331 | 73 | 8,808 | 3.63 | 319 | 62 | 9,921 | 3.62 | 359 |
| DHID-- | 81 | 9,059 | 3.74 | 339 | 93 | 9,322 | 3.81 | 355 | 104 | 9,375 | 3.78 | 354 | 135 | 9,406 | 3.79 | 357 |
| OKLA-- | 83 | 9,063 | 3.69 | 335 | 121 | 9,135 | 3.56 | 325 | 198 | 9,016 | 3.42 | 308 | 201 | 9,369 | 3.42 | 320 |
| OREG-- | 79 | 9,653 | 3.71 | 359 | 58 | 9,952 | 3.70 | 368 | 61 | 9,460 | 3.77 | 357 | 48 | 9,512 | 3.81 | 364 |
| PA---- | 130 | 8,970 | 3.74 | 336 | 162 | 9,465 | 3.70 | 350 | 155 | 9,516 | 3.57 | 339 | 181 | 9,304 | 3.67 | 342 |
| R. I-- | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| S. C-- | 4 | 8,197 | 3.36 | 276 | 5 | 5,850 | 3.29 | 193 | 36 | 8,342 | 3.83 | 319 | 29 | 8,878 | 3.80 | 337 |
| S. DAK | 1 | 7,360 | 4.37 | 322 | 1 | 12,930 | 3.70 | 478 | 1 | 9,590 | 3.90 | 374 | ... | ... | ... | ... |
| TENN-- | 42 | 7,176 | 4.05 | 290 | 56 | 7,038 | 3.85 | 271 | 54 | 8,531 | 3.80 | 324 | 18 | 7,835 | 4.00 | 315 |
| TEX-- | 31 | 7,863 | 3.55 | 282 | 14 | 8,508 | 3.77 | 321 | 13 | 8,660 | 3.77 | 326 | 9 | 9,010 | 3.93 | 354 |
| UTAH-- | 7 | 11,349 | 4.03 | 457 | 4 | 11,420 | 3.74 | 427 | 2 | 13,440 | 4.11 | 553 | 6 | 11,235 | 3.65 | 410 |
| VT---- | 46 | 10,251 | 3.73 | 383 | 43 | 10,275 | 3.70 | 381 | 52 | 10,783 | 3.65 | 394 | 34 | 10,546 | 3.68 | 387 |
| VA---- | 20 | 8,932 | 3.62 | 324 | 40 | 9,370 | 3.51 | 330 | 31 | 9,087 | 3.48 | 317 | 14 | 10,374 | 3.32 | 344 |
| WASH-- | 67 | 8,536 | 3.75 | 320 | 82 | 9,553 | 3.79 | 362 | 101 | 8,926 | 3.81 | 340 | 131 | 8,548 | 3.75 | 321 |
| W. VA- | 1 | 9,830 | 4.52 | 444 | 2 | 8,850 | 3.73 | 331 | ... | ... | ... | ... | 1 | 11,340 | 4.09 | 464 |
| WIS-- | 403 | 8,990 | 3.78 | 340 | 338 | 9,377 | 3.73 | 350 | 410 | 9,463 | 3.65 | 346 | 384 | 10,143 | 3.65 | 370 |
| WYO-- | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| U. S.- | 3,305 | 8,795 | 3.77 | 331 | 3,706 | 8,876 | 3.74 | 332 | 3,786 | 9,178 | 3.68 | 338 | 3,806 | 9,447 | 3.68 | 348 |

TABLE 12.--AVERAGE YIELDS OF OFFICIAL DHI COWS COOED AS MK.SHORTHORN BY STATE AND CALVING YEAR
ON A 2X, 305-DAY, M.E. BASIS

| STATE | 1 9 6 5 | | | | 1 9 6 6 | | | | 1 9 6 7 | | | | 1 9 6 8 | | | |
|--------|---------|--------|------|-----|---------|--------|------|-----|---------|--------|------|-----|---------|--------|------|-----|
|  | RECORDS | MILK | % | FAT | RECORDS | MILK | % | FAT | RECORDS | MILK | % | FAT | RECORDS | MILK | % | FAT |
| ALA-- | 7 | 8,183 | 3.56 | 324 | 3 | 9,827 | 3.88 | 382 | 5 | 9,382 | 3.54 | 332 | 4 | 8,917 | 3.62 | 323 |
| ALASKA | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| ARIZ-- | 2 | 12,890 | 3.80 | 490 | 3 | 8,360 | 3.79 | 317 | 1 | 8,610 | 3.05 | 263 | 16 | 12,018 | 3.40 | 406 |
| ARK-- | 90 | 11,034 | 3.35 | 370 | 87 | 10,465 | 3.45 | 361 | 16 | 10,754 | 3.46 | 371 | 50 | 10,913 | 3.57 | 390 |
| CALIF- | 11 | 13,227 | 3.91 | 518 | 9 | 12,477 | 3.72 | 465 | 7 | 15,189 | 3.53 | 537 | 61 | 11,481 | 3.71 | 426 |
| COLO-- | 60 | 9,090 | 3.60 | 327 | 37 | 10,669 | 3.61 | 385 | 24 | 11,444 | 3.78 | 433 | 25 | 10,670 | 3.96 | 422 |
| CONN-- | 2 | 8,690 | 4.77 | 415 | 3 | 9,850 | 4.04 | 398 | 4 | 12,765 | 3.94 | 503 | 2 | 9,785 | 4.12 | 403 |
| OEL--- | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| FLA-- | 7 | 9,020 | 4.01 | 361 | 3 | 10,610 | 3.96 | 420 | 4 | 9,045 | 3.83 | 346 | 6 | 9,662 | 3.60 | 348 |
| GA--- | 19 | 8,039 | 3.72 | 299 | 9 | 10,092 | 4.07 | 411 | 6 | 9,855 | 4.01 | 395 | 6 | 10,602 | 3.97 | 420 |
| HAWAII | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| IOAH0- | 52 | 9,644 | 3.71 | 359 | 55 | 9,985 | 3.62 | 361 | 24 | 10,370 | 3.76 | 390 | 22 | 12,466 | 3.67 | 457 |
| ILL-- | 216 | 8,514 | 3.65 | 311 | 84 | 8,698 | 3.59 | 312 | 12 | 10,459 | 3.67 | 381 | 39 | 11,423 | 3.77 | 430 |
| INO-- | 94 | 10,723 | 3.63 | 390 | 83 | 11,204 | 3.63 | 406 | 16 | 9,740 | 3.50 | 341 | 39 | 11,321 | 3.71 | 421 |
| IOWA-- | 594 | 9,337 | 3.69 | 345 | 522 | 9,394 | 3.71 | 348 | 137 | 9,655 | 3.66 | 353 | 293 | 9,370 | 3.71 | 348 |
| KANS-- | 122 | 9,814 | 3.79 | 372 | 98 | 9,655 | 3.80 | 366 | 26 | 9,428 | 3.71 | 349 | 40 | 9,507 | 3.62 | 345 |
| KY---- | 5 | 10,082 | 3.71 | 374 | 4 | 10,782 | 3.83 | 413 | 5 | 11,524 | 3.83 | 441 | 3 | 9,320 | 4.08 | 380 |
| LA---- | 2 | 7,770 | 3.56 | 279 | 5 | 9,750 | 3.44 | 336 | 6 | 9,765 | 3.54 | 346 | 4 | 10,712 | 3.43 | 368 |
| MAINE- | 82 | 9,084 | 3.78 | 343 | 71 | 9,175 | 3.81 | 349 | 30 | 8,145 | 3.72 | 303 | 55 | 8,933 | 3.77 | 337 |
| MD---- | 36 | 9,439 | 3.78 | 357 | 59 | 8,313 | 3.62 | 301 | 19 | 7,921 | 3.69 | 293 | 27 | 6,737 | 3.49 | 234 |
| MASS-- | 78 | 8,358 | 3.79 | 317 | 74 | 8,326 | 3.83 | 318 | 20 | 8,763 | 3.83 | 339 | 32 | 9,883 | 3.81 | 377 |
| MICH-- | 46 | 9,570 | 3.46 | 332 | 41 | 9,342 | 3.65 | 341 | 10 | 9,512 | 3.51 | 334 | 34 | 9,694 | 3.59 | 348 |
| MINN-- | 462 | 9,212 | 3.70 | 341 | 510 | 9,500 | 3.69 | 350 | 170 | 9,608 | 3.66 | 352 | 316 | 10,465 | 3.70 | 387 |
| MISS-- | 4 | 8,672 | 3.97 | 345 | 5 | 8,428 | 3.85 | 324 | 3 | 11,883 | 3.77 | 448 | 2 | 12,565 | 3.59 | 451 |
| MO---- | 242 | 10,336 | 3.90 | 403 | 212 | 10,768 | 3.86 | 416 | 40 | 10,362 | 3.71 | 385 | 131 | 10,146 | 3.75 | 380 |
| MONT-- | 2 | 9,165 | 3.68 | 337 | 11 | 7,958 | 3.90 | 310 | 1 | 8,170 | 3.61 | 295 | 3 | 11,807 | 4.20 | 495 |
| NEBR-- | 137 | 8,126 | 3.63 | 295 | 125 | 8,421 | 3.65 | 308 | 40 | 8,209 | 3.70 | 303 | 73 | 8,670 | 3.86 | 335 |
| NEV-- | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| N. H-- | 36 | 8,851 | 3.77 | 333 | 16 | 9,941 | 3.77 | 374 | 5 | 9,938 | 3.88 | 388 | 3 | 7,893 | 3.87 | 306 |
| N. J-- | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| N. MEX | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | 1 | 10,520 | 4.31 | 453 |
| N. Y-- | 78 | 10,198 | 3.60 | 367 | 64 | 9,926 | 3.66 | 363 | 16 | 11,229 | 3.54 | 398 | 38 | 10,290 | 3.51 | 361 |
| N. C-- | 2 | 12,990 | 3.84 | 499 | 5 | 11,386 | 3.81 | 434 | 5 | 12,404 | 3.89 | 482 | 3 | 13,437 | 3.48 | 468 |
| N. OAK | 50 | 9,239 | 3.65 | 337 | 54 | 9,883 | 3.60 | 355 | 16 | 8,143 | 3.75 | 305 | 28 | 10,320 | 3.68 | 379 |
| OHIO-- | 148 | 8,950 | 3.75 | 336 | 146 | 9,235 | 3.69 | 341 | 155 | 8,816 | 3.79 | 334 | 116 | 9,162 | 3.77 | 345 |
| OKLA-- | 209 | 10,100 | 3.40 | 344 | 241 | 10,002 | 3.42 | 342 | 104 | 10,352 | 3.39 | 352 | 198 | 9,990 | 3.49 | 348 |
| OREG-- | 82 | 9,665 | 3.87 | 375 | 60 | 9,870 | 3.84 | 379 | 54 | 11,254 | 4.00 | 451 | 62 | 11,039 | 4.06 | 450 |
| PA---- | 163 | 9,328 | 3.68 | 343 | 141 | 9,480 | 3.70 | 351 | 39 | 9,351 | 3.76 | 352 | 73 | 10,764 | 3.71 | 399 |
| R. I-- | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| S. C-- | 31 | 9,991 | 3.63 | 364 | 12 | 10,261 | 3.62 | 371 | 14 | 10,459 | 4.05 | 423 | 8 | 11,361 | 3.66 | 415 |
| S. DAK | ... | ... | ... | ... | 1 | 13,630 | 3.08 | 420 | 15 | 10,201 | 3.54 | 361 | 18 | 9,184 | 3.65 | 332 |
| TENN-- | 7 | 8,227 | 4.30 | 354 | 4 | 8,612 | 4.51 | 389 | 6 | 8,557 | 4.25 | 364 | 4 | 8,372 | 4.25 | 355 |
| TEX-- | 11 | 8,431 | 3.98 | 336 | 9 | 9,196 | 3.84 | 353 | 10 | 9,030 | 3.83 | 346 | 6 | 11,838 | 4.01 | 475 |
| UTAH-- | 7 | 11,471 | 3.74 | 429 | 5 | 11,302 | 3.96 | 447 | 4 | 12,250 | 3.95 | 483 | 7 | 11,606 | 3.86 | 448 |
| VT---- | 31 | 11,210 | 3.64 | 408 | 46 | 10,047 | 3.76 | 377 | 8 | 9,667 | 3.55 | 343 | 30 | 10,346 | 3.69 | 382 |
| VA---- | 10 | 9,725 | 3.41 | 331 | 3 | 11,493 | 3.56 | 409 | 3 | 9,967 | 3.57 | 355 | 4 | 9,505 | 3.64 | 346 |
| WASH-- | 120 | 8,808 | 3.81 | 336 | 112 | 9,343 | 3.74 | 349 | 37 | 10,238 | 3.70 | 379 | 66 | 10,502 | 3.85 | 405 |
| W. VA- | 1 | 9,640 | 4.07 | 392 | 1 | 11,890 | 4.00 | 476 | 1 | 5,690 | 3.78 | 215 | ... | ... | ... | ... |
| WIS-- | 402 | 9,432 | 3.70 | 349 | 394 | 9,517 | 3.69 | 351 | 91 | 10,089 | 3.69 | 373 | 211 | 9,927 | 3.78 | 375 |
| WYO-- | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... |
| U. S.- | 3,760 | 9,429 | 3.69 | 348 | 3,427 | 9,604 | 3.68 | 354 | 1,209 | 9,753 | 3.69 | 360 | 2,159 | 10,066 | 3.71 | 374 |

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